A281.9
Ag8A
Cop.6

STA/STA

United States
Department of
Agriculture

Economic
Research
Service

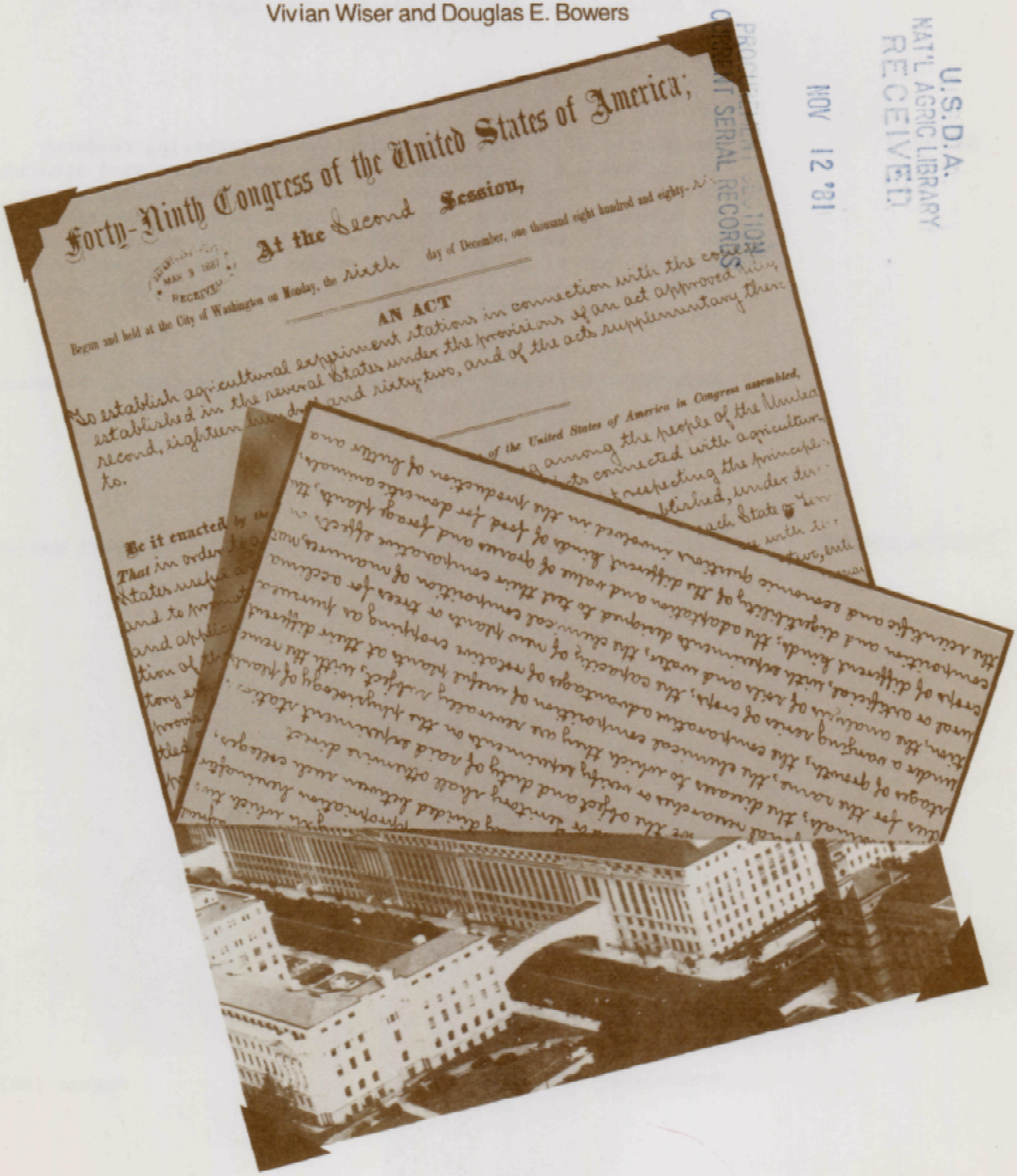
Agricultural
Economic
Report Number 475

Marketing Research and Its Coordination in USDA

A Historical Approach

Vivian Wiser and Douglas E. Bowers

U.S.D.A.
NAT'L AGRIC LIBRARY
RECEIVED
NOV 12 '81
PROCUREMENT SECTION
CURRENT SERIAL RECORDS



MARKETING RESEARCH AND ITS COORDINATION IN USDA: A HISTORICAL APPROACH, by Vivian Wiser and Douglas E. Bowers. National Economics Division; Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 475.

ABSTRACT

For nearly 100 years, administration of marketing research within the U.S. Department of Agriculture and related agencies has ranged from nearly complete centralization in one agency to having marketing research in several agencies coordinated at a higher level. Coordination has been the subject of many studies, but no one method has proven entirely satisfactory. Marketing research is a useful case study of the administration of agricultural research.

Keywords: Marketing research, Agricultural research, Research coordination.

ACKNOWLEDGMENT

The authors wish to express their appreciation to Cecil Harvey for preparing the chronology section.

Washington, D.C. 20250 August 1981

CONTENTS

	Page
SUMMARY	ii
CHRONOLOGY OF MARKETING INSTITUTIONS	v
INTRODUCTION	1
ROOTS AND DEVELOPMENTS TO 1945	2
Experiment Station Funding	6
Early Marketing Studies	10
Scientific Research Expanded	12
Federal Marketing Work Formalized	17
Research in the Early Twenties	21
Postwar Agricultural Research	22
Research Funded for Economics, Home Economics, and Sociology	26
Research During the New Deal	31
Expanded Research Under the Bankhead-Jones Act	34
Utilization Research Laboratories	37
Impact of the War on Research	40
MARKETING RESEARCH COORDINATION, 1946-64	46
The Early Years of Research and Marketing Act	49
Centralizing Marketing Research Administration: Coordination in the Fifties	62
Decentralizing Administration: The 1961 Reorganization	70
REASSESSING RESEARCH: THE LONG-RANGE STUDY AND AFTER	74
The Debate on Coordination	74
Research Under the Long-Range Study	75
The Regionalization of Agricultural Research Service	80
Reorganization of Economic Research	84
Congressional Review of the Agricultural Research Service Reorganization	87
Other Studies of Agricultural Research	89
A New Look at Research--the Act of 1977	96
Establishment of the Science and Education Administration	100
Review of Marketing Research	103
CONCLUSION	109
GLOSSARY OF ABBREVIATIONS	110

SUMMARY

A survey of efforts to coordinate Government sponsored marketing research shows that there has been no single, effective way to meet that objective. Coordination has ranged from informal exchanges of information between various segments of the research establishment to highly centralized administration. Numerous conferences, committees, and task forces have studied the problem and the Department has reorganized marketing research several times in an effort to find the best type of administration. But no one organization has been found clearly superior to the others. The problem of fashioning a unified program from the differing perspectives of the several Federal and State agencies that conduct marketing research is one that still awaits solution.

Marketing research has been a more recent development in the agricultural community than production research and it has been subjected to the same patterns of coordination as other research. Its support has fluctuated widely over the years. Research before the passage of the Hatch Experiment Station Act was spasmodic in both the States and USDA. Thereafter the director of the Office of Experiment Stations provided a measure of supervision over the station network closely cooperating with the directors of the stations and with the representatives of the land grant college association. Research, meanwhile, in USDA was expanding rapidly and soon after the turn of the century included studies of production for marketing. Such studies in USDA were made primarily by the rapidly growing Bureau of Plant Industry and Bureau of Statistics. The first step in consolidation of marketing research came when the Office of Markets was established in 1913. However, it soon had a combination of service, regulatory, and research activities following the pattern of the scientific bureaus.

Generally, the emphasis in the experiment stations continued to be slanted toward production under the general direction of the Chief of the Office of Experiment Stations, and that of the Office or Bureau of Markets continued on a parallel course, a pattern followed for years to come.

While research in the experiment stations had been expanded under the Adams Act of 1906, economic, home economic, and sociological work was underwritten in both the experiment stations and USDA under the Purnell Act of 1925. And still the question of integrating the efforts continued as an undercurrent.

Finding outlets for farm products and their increased utilization were elements of concern in the twenties and thirties when emphasis in Departmental activities was being shifted to

action programs. However, when Europe became engulfed in war, some in USDA, Congress, and the experiment stations were thinking about the postwar period and were anxious to prevent a recurrence of market conditions that had occurred after World War I. Various proposals for such research were discussed and introduced in Congress.

The Research and Marketing Act of 1946 launched a vast new program of marketing research designed to put marketing on par with production research. The act greatly increased the amount of money spent on marketing research, both on the Federal and State levels,and set up a series of advisory committees which for the first time allowed farmers, agricultural industry, and State researchers a significant role in initiating projects. The act also gave a boost to regional research and Federal contracting. However, the centralized administration of marketing research contemplated in the act did not come close to reality until 1953, by which time the emphasis was again shifting to other fields. Marketing research also suffered from a confusing appropriations process, disagreement between Federal and State officials, and lack of a carefully drawn research plan. By the midfifties, Congress no longer appropriated marketing funds as a separate program.

In 1961 research organization was again decentralized and marketing research divided between agencies. The farmer-industry advisory committees declined in importance and were eventually abolished. During the sixties researchers in and out of USDA debated the merits of coordination, with those favoring greater coordination generally winning. Federal and State agencies drew up the first comprehensive research plan, the Long-Range Study (1966), which became the basis of future research. Marketing research fell somewhat out of favor, though the 1946 requirement that 20 percent of experiment station funds be devoted to marketing continued.

The Agricultural Research Service was reorganized along regional lines in 1972, which resulted in the transfer of direct control of many activities from the Washington area. A marketing research coordinating committee was appointed and 2 years later a national and regional research planning system was established. There was considerable criticism of ARS and the later consolidation of lines of work in the Science and Education Administration.

There were conferences, hearings, investigations, and a number of reports on agricultural research, with some attention to marketing research. Each had its recommendations and its call for coordination.

By this time the relative positions of research agencies had changed. Experiment stations no longer had direct lines to their State legislatures. Research units that once had direct access to the Secretary of Agriculture now had several intermediate layers to penetrate. Then, too, a number of agencies outside USDA were involved in agricultural research.

Economic agencies responsible for research in marketing economics were also undergoing organizational changes. In 1977 the Economic Research Service, the Statistical Reporting Service, and the Farmer Cooperative Service were consolidated in the Economics, Statistics, and Cooperatives Service. However, on October 1, 1980, the agency was redesignated as the Economics and Statistics Service with the establishment of the Agricultural Cooperative Service. On June 17, 1981, ESS was abolished and ERS and SRS were reestablished. ERS is continuing some work closely related to marketing research, such as the "market basket" of food and cost spreads between the farmer and the consumer.

Early in 1978 the Agricultural Research Service, the Extension Service, Cooperative State Research Service, and the National Agricultural Library were combined in the Science and Education Administration (SEA). Again a regional approach was taken to integrate activities, evoking considerable criticism. Marketing research on wholesale market facility development and some market efficiency and transportation research was transferred from SEA to the Agricultural Marketing Service in 1979. This increased the problem of marketing research coordination by further fragmenting marketing efficiency research. The 1981 reorganization also abolished the Science and Education Administration and reconstituted the Agricultural Research Service, the Extension Service, the Cooperative State Research Service, and the National Agricultural Library as separate agencies.

CHRONOLOGY OF MARKETING INSTITUTIONS

December 7, 1796. President George Washington recommended the establishment of a National Board of Agriculture.

May 15, 1862. Law establishing the U.S. Department of Agriculture approved.

May 20, 1862. Homestead Act approved.

July 2, 1862. Morrill Land-Grant College Act approved.

1887. Marketing Farm Produce by George W. Hill published.

March 2, 1887. Passage of Hatch Experiment Station Act.

October 1887. Establishment of Land-Grant College Association.

October 1888. Office of Experiment Stations established in the Department of Agriculture.

February 9, 1889. Department of Agriculture raised to Cabinet status.

March 23, 1889. An Assistant Secretary appointed to supervise scientific work.

March 23, 1897. Special agent in charge of scientific work appointed.

1898. Appointment of U.S. Industrial Commission.

1906. Experiment Station Committee on Organization and Policy (ESCOP) appointed by the Land-Grant College Association.

March 16, 1906. Adams Act approved.

1910. American Farm Management Association organized.

May 16, 1913. The Office of Markets was set up in USDA.

July 1, 1915. States Relations Service established, bringing together extension, home economics, and experiment station work.

1916. National Association of State Commissioners, Secretaries, and Directors of Agriculture established.

July 1, 1917. Bureau of Markets established.

February 1920. National Association of State Marketing Officials established.

June 7, 1921. Joint Commission of Agricultural Inquiry was established.

October 19, 1921. Director of Scientific Work appointed.

1922. New England Research Council on Marketing and Food Supply was organized.

January 23-25, 1922. National Agricultural Conference met.

July 1, 1922. Bureau of Agricultural Economics (BAE) established.

July 1, 1923. States Relations Service was abolished.

February 24, 1925. Purnell Act approved.

July 2, 1926. Cooperative Marketing Act approved.

1929. National Chamber of Agricultural Cooperatives established.

June 15, 1929. Agricultural Marketing Act, establishing the Federal Farm Board, approved.

1934. Position of Director of Scientific Work abolished.

1934. Division of Marketing Research established in Bureau of Agricultural Economics.

June 29, 1935. The Bankhead-Jones Act, providing for expanded research, approved.

March 16, 1936. Chief of Office of Experiment Stations designated Director of Research.

February 16, 1938. Agricultural Act of 1938 provided for regional utilization research laboratories.

October 16, 1938. Director of Marketing and Regulatory Work established in general reorganization of USDA.

July 1, 1939. Grouping of marketing and regulatory services in Agricultural Marketing Service.

February 23, 1942. Agricultural Research Administration established with general supervision over scientific research.

February 23, 1942. Agricultural Marketing Service and Surplus Marketing Administration merged to form Agricultural Marketing Administration.

December 5, 1942. Agricultural marketing programs consolidated under the Food Distribution Administration.

August 20, 1945. Establishment of Production and Marketing Administration.

August 14, 1946. Research and Marketing Act approved.

October 24, 1946. National Advisory Committee appointed (Subsequently renamed Agricultural Research Policy Committee and later National Agricultural Research Advisory Committee.)

December 27, 1946. Administrator of the Research and Marketing Act appointed.

July 29, 1949. Oversight of Research and Marketing Act work transferred to Agricultural Research Administration.

1950. A Congressional Investigation (The Doane Report) recommended a single administration for research.

1950. Congress set up the National Science Foundation.

1951. National Research Council set up the Agricultural Research Institute.

January 21, 1953. Agricultural Research Service established; the Office of Experiment Stations and scientific bureaus abolished.

January 21, 1953. Agricultural Marketing Service established consolidating marketing work.

December 4, 1953. Establishment of Farmer Cooperative Service.

1957. Engineering research studies were made on peanut grading, leading to development of a mechanized grading system used for mandatory inspection.

April 3, 1961. Economic Research Service established.

September 1, 1961. Cooperative State Research Service established.

December 11, 1963. Director of Science and Education created.

July 24, 1964. Agricultural Research Planning Committee (ARPC) appointed.

1965. Senate Appropriations Committee urged a joint USDA-SAES review committee to evaluate all Government research concerning agriculture.

August 4, 1965. Special research grants were provided for in legislation for USDA.

1966. A National Program of Research for Agriculture (Long-Range Study) published.

April 1966. Current Research Information System (CRIS) was initiated.

1968. Shaffer report calls for better coordination of research.

1969. Agricultural Research Policy Advisory Committee established to supersede Agricultural Research Policy Committee.

1972. National Research Council, Report of the Committee on Research Advisory to the U.S. Department of Agriculture (Pound Report) released.

April 21, 1972. Agricultural Research Service reorganized along regional lines.

1973. Marketing Economics Division abolished in major reorganiation of Economic Research Service.

1973. National Agricultural Research Advisory Committee abolished.

1973. Position of Director of Science and Education lapsed.

January 11, 1974. National Planning Committee replaced ARPF.

April 18, 1974. French Report on an improved research information system.

June 1974. Technical advisors appointed in Agricultural Research Service to coordinate research.

October 1974. House Appropriations Committee asked its investigative staff to review the reorganization of ARS.

November 1974. World Food Conference in Rome.

December 3, 1974. President Ford asked National Science Foundation to develop recommendations on how research might be applied to meet challenges raised at the World Food Conference in Rome.

1975. Management and Planning System (MAPS) adopted in ARS.

1975. Agricultural Research and Development hearings held.

1975. Initiation of Current Agricultural Research Information System by the Food and Agriculture Organization of the United Nations.

1975. Cooperative State Research Service selected marketing research as an area for evaluation and study.

1975. Current Research Information Systems Operation Council established.

July 1975. National conference on research held in Kansas City.

November 1975. Report of Board on Agriculture and Renewable Resources of National Science Foundation.

December 9, 1975. Committee on Food and Nutrition Research in the Federal Council for Food and Technology established.

April 6, 1976. General Accounting Office released its report Agricultural Research: Its Organization and Management.

May 11, 1976. National Science and Technology Policy, Organization, and Priorities Act of 1976 approved.

August 1976. House Committee on Science and Technology report on its review of agricultural research.

August 1976. Report by Emerson Babb on marketing research at State experiment stations.

1977. Competitive Grants Office established in CSRS.

May 9-11, 1977. The ESCOP Marketing Subcommittee held a workshop on coordinating marketing research.

September 29, 1977. The National Agricultural Research, Extension, and Teaching Policy Act of 1977 was enacted as Title XIV of the Food and Agricultural Act of 1977.

October 5, 1977. Establishment of Economics, Statistics, and Cooperatives Service.

November 16, 1977. Committee on Coordinating Marketing Research appointed.

1978. Establishment of Joint Council of Food and Agricultural Sciences.

January 24, 1978. Establishment of Science and Education Administration, combining Agricultural Research Service, Extension Service, Cooperative State Research Service, and the National Agricultural Library.

February 16, 1978. Establishment of the National Agricultural Research and Extension Users Advisory Board.

May 1978. Industrial Research Institute Corporation asked to review postharvest technology research from the industry viewpoint.

August 28, 1978. Industry Assessment of USDA PostHarvest Technology Research released.

January 1979. Cooperative Research in Post-Harvest Technology issued by Science and Education Administration.

March 1979. Post-Harvest Technology Research report released by Agricultural Research, Science and Education Administration.

March 9, 1979. Certain marketing research functions were transferred from Science and Education Administration to the Agricultural Marketing Service.

October 1, 1980. Most of the work relating to cooperatives was transferred from Economics, Statistics, and Cooperatives Service to the new Agricultural Cooperative Service. ESCS was redesignated Economics and Statistics Service.

June 17, 1981. Economics and Statistics Service was abolished and Economic Research Service and Statistical Reporting Service were established. As part of the same reorganization, Science and Education Administration was abolished. Agricultural Research Service, Extension Service, Cooperative State Research Service, and the National Agricultural Library became separate agencies reporting to the director of science and education.

Marketing Research and Its Coordination in USDA

A Historical Approach

Vivian Wiser and Douglas E. Bowers

INTRODUCTION

This history of coordinating marketing research was undertaken at the request of the Committee on Coordinating Marketing Research, a subcommittee of the Agricultural Research Policy Advisory Committee. It provides a historical perspective for the committee's overall survey of public marketing research coordination, planning, implementation, and evaluation.

We discuss the evolution of the marketing research administration within the total context of agricultural research. In this way, marketing research may serve as a case study of the U.S. Department of Agriculture's (USDA's) coordination of agricultural research in general.

The study is divided into three parts. "Roots and Development to 1945" deals with the emergence of agencies involved in agricultural research and related organizations, legislation enacted to support research, and efforts to integrate or coordinate such work. The second section, "Marketing Research Coordination, 1946-64," discusses the greatly expanded research program of the Research and Marketing Act of 1946 and its influence over the next two decades on agricultural administration. The third section covers the reevaluation of research following the Long-Range Study of 1966, a period in which marketing research was deemphasized.

Certain common threads run through the three parts. This is the story not merely of administration at the highest levels, but of the working relations between USDA and the States, the role of the land grant college association and other interested groups, congressional oversight of agricultural research, and the use of organizational changes to redirect research policies. Each period illustrates these themes in its own way. Taken as a whole, this paper shows just how complex the process has been by which the agricultural research establishment has reached its present state. It will be useful to others interested in reorganizing or reorienting the activities of USDA agencies and studying the relations of these agencies with State agricultural experiment stations and other research institutions.

ROOTS AND DEVELOPMENTS TO 1945

Early interest in agricultural research developed in colonial America on an individual basis with farmers writing to each other about their experiments to increase crop or livestock production. Later, some prepared papers for scientific or literary organizations; some wrote of their travels describing agriculture in various colonies; some kept diaries of work done; and some published short essays or leaflets. Family, commercial, educational, and cultural ties with England were strong. Under the leadership of Benjamin Franklin, the American Philosophical Society, the American counterpart of the Royal Society of London, was organized in Philadelphia in 1743. Here, scientific discussions frequently turned to agriculture, since many members had rural interests. 1/

In the late 18th century, some of the gentlemen farmers formed agricultural societies, providing formal centers for the interchange of information and the encouragement of improvements in agriculture. Two of the best known were the Philadelphia Society for the Promotion of Agriculture and the South Carolina Society for Promoting Agriculture, both organized in 1785. These included men such as Washington and Jefferson, who provided leadership and prestige to the long struggle for Federal recognition of agriculture. That struggle eventually was to result in the establishment of the Department of Agriculture, the land-grant college system, the State agricultural experiment stations, and State agricultural agencies. 2/

President Washington, although he had hesitated earlier to recommend the establishment of an experimental station under government patronage, in his final message to Congress on December 7, 1796, endorsed the establishment of a national board of agriculture that would among other activities "encourage and assist a spirit of discovery and improvement."3/

Exhibitions and competitions encouraged improvement. Some, such as the Arlington sheep shearing, were sponsored by

---

1/ Alfred C. True. A History of Agricultural Experimentation and Research in the United States, 1607-1925. U.S. Dept. Agr., Misc. Publ. No. 251, 1937, pp. 1-9; American Philosophical Society. Early Proceedings, 1734-1843. Philadelphia, 1884, 875 pp.

2/ Wayne D. Rasmussen. Agriculture in the United States: A Documentary History. New York: Random House, 1975. Vol. 1, pp. 271-307.

3/ Everett Edwards. Washington, Jefferson, Lincoln and Agriculture. U.S. Dept. Agr., Bur. Agr. Econ. 1937, p. 31.

individuals, and others, such as the Berkshire Agricultural Society cattle shows, by an organization. To these was added an agricultural press, beginning with the Agricultural Museum in 1810 and the American Farmer in 1819. Many of the agricultural societies used the press to publicize their activities. Moreover, the merino, silk, horticultural, and other special organizations used the new media. The journals served as the advertising agency for the growing farm equipment, seed, and fertilizer industries.

State activities varied greatly. Some States established boards of agriculture. Geological and agricultural surveys were made by a number of States, especially during and after the 1830's. Agricultural chemists and geologists were appointed and they were especially interested in fertilizer materials and their relationship to agriculture. Sometimes these officials were connected with colleges or universities.

The societies served as a media for producers to discuss such topics as prices, transportation, marketing, and availability of materials needed for production. They petitioned their State legislatures and their representatives in the U.S. Congress or when international issues were involved, the Department of State, for amelioration of serious problems.

Congress authorized the use of $1,000 of Patent Office funds for the collection of statistics and other agricultural purposes in 1839. Seeds and plants were collected and distributed, reports or articles published, tests made, and statistics collected and published in the agriculture section of the Patent Office's annual report.

Meanwhile, agricultural societies were advocating the establishment of farm schools or experimental farms and seeking State support for their activities. Funds were appropriated for the societies and for the establishment of State boards of agriculture to foster the organization movement. In turn, they urged the founding of agricultural colleges with farms attached; they further urged that a national agricultural society be established as well as a Federal agency to foster agriculture.

The Homestead and Land-Grant College Acts and the act establishing the U.S. Department of Agriculture (USDA), all in 1862, gave greater recognition and Federal assistance to agriculture. The new Department had only nine primary employees; but these soon included a chemist, a statistician, an entomologist, and a botanist. As work expanded, divisions were established. However, the editor of the Commissioner's (later the Secretary's) annual report continued to rely on

people from outside the Department for articles. The Department also published a monthly or bimonthly report, which was a compilation of information requested on crop conditions. The September 1863 issue was designed "to show the American farmers the foreign markets which purchase so largely of their breadstuffs." From the beginning there was an awareness that agricultural progress depended upon "the continued and increased demand for our products both at home and abroad." The first annual report had included statistics on exports, 1826-62. Successive reports and other publications continued to publish this information. In addition, there were special articles on the processing of agricultural commodities. 4/

Ties between USDA, the increasing number of agricultural societies, and the new agricultural colleges were erratic. The Department depended on the organizations for information requested in its circulars. Seeds and plants as well as publications were sent to the societies, thereby disseminating, to a limited extent, the results of the Department's work. Even though USDA collected information on exports and imports and on such subjects as cheese manufacturing and meat packing, producers interested in improving the marketing situation turned increasingly to such organizations as the National Grange for the solution of some of their problems.

The colleges, aware of the expanding scope of the agricultural work of the Federal Government, began to realize that united action in planning and conducting work was desirable and would cut unnecessary duplication. Representatives from 12 of the land-grant colleges met in Chicago in August 1871 to discuss accelerating research. They resolved that a committee should be appointed to ask the Congress and the State legislatures to establish experiment stations throughout the country. However, the committee did not prepare any plan for their support by public money. 5/

Meanwhile, Frederick Watts, Commissioner of the U.S. Department of Agriculture, invited representatives of the land-grant colleges, agricultural societies, and State boards of agriculture to a national agricultural convention in Washington in mid-February 1872. He especially wanted to bring the colleges in closer harmony with each other and with the Department. Again, a committee on experiment stations was appointed. Its

---

4/ U.S. Department of Agriculture. Annual Report. 1862, pp. 13, 599-613; 1863, pp. 207-15.

5/ H. C. Knoblauch and others. State Agricultural Experiment Stations: A History of Research Policy and Procedure. Misc. Pub. No. 904, U.S. Dept. Agr., 1962, pp. 29-34.

report stressed the importance of establishing stations with the help of individuals, agricultural societies, the States, and the Federal Government. Discouraged, Watts cancelled a convention called for the following year. 6/

Unable to obtain Federal support, proponents of the State stations went to their legislatures and the first station was organized in Connecticut in 1875, independent of any land-grant college. But, a number of those in Midwestern States favored a connection with one of these colleges as well as cooperation in research and they formed the Teachers of Agriculture Association.

The new USDA Commissioner, George Bailey Loring, hoping to bring the colleges in closer relation to his Department, called a convention to meet in January 1882. Proponents of the experiment stations were unable to promote their cause beyond getting the convention to agree that scientific investigation was as essential to the agricultural college as teaching. Then they voted that Loring should administer joint experiments among colleges and stations wishing to participate.

Four months later, advocates of the experiment station idea had a bill introduced in the Congress which proposed that USDA establish national experiment stations in connection with the State agricultural colleges. Others felt that the States should primarily control the proposed stations but with Federal as well as State financial support. This difference of viewpoint as to basic control was to be an underlying theme in the years to follow. Additional conventions would be held in 1883 and 1885. 7/

Norman Colman, Loring's successor, felt that proposed legislation providing for these institutions across the country should include financial support. Moreover, he urged that authorization and adequate appropriation be made for a new office within USDA to "prevent useless and wasteful duplications...and...cooperation and concerted action...." However, if the office did nothing more than serve as a medium of communication, it would be indispensable. As a portent of the future, he thought that the central station should receive, edit, criticize, digest, consolidate the results of the work in the States, and publish this in popular form.

6/ A. C. True. A History of Agricultural Education in the United States, 1785-1925. Misc. Pub. No. 36, U.S. Dept. Agr., 1929, pp. 192-95.

7/ True, History of Agricultural Education in U.S. Pp. 200-208.

The Commissioner had already sent an agent to visit those State stations already established to report on their work, facilities, and needs. 8/

Meanwhile, the college representatives had found the conventions a convenient framework within which to work and promote their ideas. Their proposed organization, the Association of American Agricultural Colleges and Experiment Stations, however, did not become a reality until 6 months after the passage of the Hatch Experiment Station Act, approved March 2, 1887. 9/ This association has played an important role in the development and implementation of research policy in the experiment stations as well as the Department. Up to that time, USDA had paid scientists and other specialists to prepare reports on certain subjects, some of which entailed research. Thus, the Department supplemented its own research.

Experiment Station Funding

The Hatch Act provided for the establishment of State experiment stations under the direction of the respective land-grant colleges. They were to conduct "original research" on agricultural industry, considering varying conditions and needs of the States. The stations were to make annual reports on their work to the Secretary of Agriculture on forms provided to secure uniformity. The Act authorized an annual payment of $15,000 to each State and territory. Further, not more than one-fifth of this was to be spent the first year and not more than 5 percent thereafter was to be used on building construction or repair.

When the Office of Experiment Stations was established in October 1888, W. A. Atwater was appointed as its first director, retaining his post as director of the Connecticut Experiment Station. Although its primary functions were to act as a clearing house and in an advisory capacity to the new experiment stations, it also sought to indicate prospective lines of investigation and to coordinate the work to prevent duplication. The office became the center for information about and for the State experiment stations. An index to research and publications of the States was also instituted. On February 15, 1889, Secretary Colman signed, as his first public document, Experiment Station Bulletin No. 1, Organization of the Agricultural Experiment Stations in the United States. This series was intended for distribution to the State stations and those concerned with science in agriculture. It is interesting to note that one of the other series,

8/ U.S. Department of Agriculture. Annual Report. 1886, pp. 12-14.

9/ 24 Stat: 440.

"Farmers Bulletins," was begun at the instigation of the Office of Experiment Stations to present the results of their stations' research in a form understandable by the ordinary farmer. Of course, the popular bulletins now originate in many agencies of the Department. In September of the same year, the Experiment Station Record was inaugurated for the publication of abstracts of bulletins of the various experiment stations and the Department; it was continued under this name until 1946. 10/

At the end of 1888, there were 46 stations in the United States with 43 receiving funds under the Hatch Act. These new stations were concerned about the development of research in their installations and in USDA offices, that could presumably get funds easily, an underlying current that would continue in the years ahead. In fact, Edwin Willits, the first Assistant Secretary of Agriculture, even opposed the establishment of an experimental farm by the Federal Department in the Washington area at the 1889 meeting of the land-grant college association. 11/

While the Office of Experiment Stations served in a very limited way as a rallying point for the budding experiment stations, there was no continuing comparable agency for the various scientific divisions and the Bureau of Animal Industry, established in 1884. The Commissioner, as a political appointee, was subject to change with Administrations. Moreover, while he might have been somewhat cognizant of scientific matters, the Chief Clerk, second in charge in the Department, frequently had a more limited background.

The 1889 legislation which gave the Department Cabinet status to be headed by a Secretary also provided for an Assistant Secretary. Edwin Willits, president of Michigan Agricultural

---

10/ U.S. Department of Agriculture, Office of Experiment Stations. Cir. No. 16, 1890.

11/ National Association of State Universities and Land-Grant Colleges. Proceedings. 1896, pp. 55-56. Hereafter cited as Nat. Assn. of State Univ. Proceedings. Association organized in 1887 as Association of American Agricultural Colleges and Experiment Stations and changed in 1920 to Association of Land-Grant Colleges, in 1926 to Association of Land-Grant Colleges and Universities, in 1955 to American Association of Land-Grant Colleges and State Universities, in 1962 to Association of State Universities and Land-Grant Colleges, and in 1965 to National Association of State Universities and Land-Grant Colleges. The association is hereafter referred to in the text as the land-grant college association.

College, was appointed to the position and placed in charge of the scientific work in the Department. However, this did not solve the problem of continuity of scientific policy. Therefore, those concerned about this aspect recommended that a director of scientific work be appointed who would not be affected by political changes. 12/ Secretary J. Sterling Morton proposed that the position be established. The land-grant college association termed it "of the highest value to the cause of scientific agriculture." Scientific organizations testified before the Senate Committee on Agriculture and even Theodore Roosevelt wrote in favor of it. A national election brought James Wilson, "Tama Jim," in as Secretary of Agriculture. Charles W. Dabney, who had served as Assistant Secretary under Morton, was appointed as "agent in charge of scientific work" on March 23, 1897. He was to direct the scientific and statistical divisions, referring questions of administrative policy to the Secretary. Dabney only stayed until September 1897, when "Tama Jim" assumed direction of scientific and regulatory work. 13/

Early experiment stations had been established to meet the needs of individual States. As others came into being under the authority of the Hatch Act, they too emphasized certain areas of research. However, there were some areas of common concern to them, their host institutions, the Federal Office of Experiment Stations, and the land-grant college association. Some early meetings of representatives of the stations were held to discuss how the fertilizer work could be done cooperatively so as to produce comparable results for publication in overall bulletins. Others were held for various specialists to enable them to become aware of work being done in other stations. Professional organizations representing employees were invited to cooperate with the land-grant college association. 14/

12/ Nat. Assn. of State Univ. Proceedings. 1896, pp. 55-56.

13/ J. Sterling Morton to James W. Wadsworth, Feb. 11, 1896, Secretary's Letters 16: pp. 242-48; J. Sterling Morton to Redfield Proctor, Mar. 3, 1896, Secretary Letters 16: pp. 441-44; James Wilson to chiefs of scientific divisions and bureaus, Mar. 23 and Sept. 30, 1897; James Wilson to H. W. Wright, May 3, 1897, Secretary's Letters 22: p. 427, Record Group 16, National Archives, hereafter cited as RG--, NA; U.S. Congress, Senate Committee on Agriculture and Forestry. Report on S. 3131. May 13, 1896, Senate Report No. 933. 45 pp.

14/ Knoblauch and others. State Agricultural Experiment Stations. 1962, pp. 73-79.

From the beginning there have been many discussions of areas of work. Some saw a great need for integrated work and institutions sought to insure that the professors were involved in experimentation or were aware of advances. They also felt that the professors and the experimenters must have close ties to the farmer in order to be able to respond to and anticipate his needs. Others felt that there should be a clear line of demarcation between research and teaching and that the experimentation frequently fell to graduate assistants. One suggested solution was for the investigators to work with seniors in their last semester. The question was somewhat clarified by a ruling of the U.S. Attorney General on May 10, 1899, upholding a USDA ruling that Hatch Act funds were not to be used for paying teachers' salaries or any other expenses connected with instruction. 15/

In an attempt to strengthen research within the Department and no doubt to achieve a greater measure of control over it, Secretary Wilson directed officers of the Department desiring cooperation with the stations to first present their plans to the Secretary for his approval. Then the director of the Office of Experiment Stations was to contact the respective station for its decision. Such cooperative research was not to take the place of the station's own program. The order was evidently ignored or rescinded and the scientific divisions and bureaus proceeded independently. However, on April 15, 1902, another attempt was made to standardize procedures. Secretary Wilson asked that chiefs of bureaus and divisions intending to work in cooperation with State experiment stations make preliminary arrangements with station directors, draft agreements covering the work for the signature of the Secretary and director, and furnish a copy of the signed agreement to the Office of Experiment Stations. 16/

Atwater as director of the Office of Experiment Stations had high standards for the State stations. The viewpoint of the scientist rather than the farmer should govern administrative policy. The State director should be a topnotch scientist, supported by a staff of highly trained scientists, essentially free from undergraduate teaching. But Atwater resigned in 1891 to devote full attention to the Connecticut station. He was succeeded by Abram W. Harris. He, in turn, was followed by Alfred C. True who served until 1915. State

---

15/ Office of Experiment Stations. Circulars No. 1-30, 1889-1896; Expt. Sta. Bull. No. 3, 1889, 12 pp.

16/ Nat. Assn. of State Univ. Proceedings. 1899, pp. 52-53; 1938, pp. 172-173; circular letter from James Wilson, Apr. 15, 1902, RG 16, NA.

directors were finding that work with the farmers' institutes was popular in the States. Nonetheless, there were those who felt that this was an improper use of the funds appropriated to implement the Hatch Act. In addition to a call for greater emphasis on scientific work, they undertook a campaign for additional funds for experiment station research. 17/

Then in 1903, the Executive Committee of the land-grant college association asked True to prepare a statement of capabilities of the stations for increased work and the need for additional funds to support it. True had inaugurated an inspection program, or as he termed them, personal visits, to determine whether the stations had used funds as the Hatch Act directed. This had resulted primarily from Secretary Morton's deletion of the station fund from his appropriation request for 1895. The ensuing act provided that the Secretary prescribe the form of the annual financial report and determine that the expenditures be in accordance with the Hatch Act. True looked on the visits in much the same way that many of his successors have as conferences with the stations on their work and how it could be made more effective. Although True was not a scientist by training, he set high standards for the stations, in line with policies of the career directors. He attempted to standardize operations by setting common goals for the stations. But governing boards intervened, preferring a program that would emphasize education and more immediate assistance to farmers. Moreover, States were content to permit the use of Hatch Act funds for this purpose and begrudged appropriating funds for a program for which they believed the Federal Government was providing in its scientific agencies. 18/

Early Marketing Studies

From its establishment, the USDA had published information about exports and imports of agricultural commodities and there was some concern about markets for our farm products. On occasion, representatives were sent to protect or extend those markets. When exports of cattle were being rejected because of charges of infection with pleuropneumonia in 1879, Charles P. Lyman, a prominent veterinarian, was sent to Britain to determine the validity of the charges. During Secretary Rusk's administration, an agent was sent to Germany and Denmark to promote the exportation of corn. Jacob R. Dodge, the prolific statistician and editor, in 1893, submitted to the Secretary for publication a report on world production and distribution of agricultural commodities. The publication, Dodge wrote, represented a compilation of information collected over a

17/ Knoblauch and others. State Agricultural Experiment Stations. 1962, pp. 81-89.

18/ Knoblauch and others. State Agricultural Experiment Stations. 1962, pp. 90-95.

number of years. This was the capstone, for Dodge soon left USDA. Henry C. Taylor described it as a report that "may be looked upon as the beginning of serious study of world markets for agricultural products by the Department." 19/

George W. Hill, who had been one of Dodge's subordinates and became chief of the Publication Division, prepared another milestone publication. In 1897, his Marketing Farm Produce, described the importance of proper handling by the producer, the need for a uniform product, quality, and the value of proper packing. He gave directions for specific commodities and suggested proper types of containers. Taylor considered it a landmark, the first marketing publication. 20/

The following year, 1898, the U.S. Industrial Commission was appointed to collect information on immigration, labor, agriculture, manufacturing, and business. Testimony and reports on distribution of farm products, agriculture and agricultural labor, and agriculture and taxation comprised three volumes. A number of USDA officials appeared before the commission, including A. C. True who discussed the work of the Office of Experiment Stations and of State stations. John Franklin Crowell, an educator/economist, prepared the report on marketing, described by H. C. Taylor as the "best book on agricultural marketing available to students of agricultural economics at the beginning of the twentieth century" and the most complete presentation of the subject before World War I. Taylor also believed that it set the pattern for many studies made by the experiment stations for two decades after its publication. The final summary volume of the report recommended legislation and action, including inspection and grading of agricultural commodities and livestock; inspection of nursery stock; and the establishment of a food section in the Bureau of Chemistry. The

---

19/ Vivian Wiser. Protecting American Agriculture, AER No. 266. U.S. Dept. Agr., 1974, p. 5; U.S. Department of Agriculture, Division of Statistics, Production and Distribution of the Principal Agricultural Products of the World. Misc. Series, Rpt. No. 5, 1893, 204 pp.; Henry C. and Anne Dewees Taylor. The Story of Agricultural Economics. Iowa State College Press, Ames, Iowa, 1952, pp. 510-11.

20/ George W. Hill. Marketing Farm Produce. Farmers' Bull. No. 62. U.S. Dept. Agr., 1897, 27 pp.; J. T. Horner. "The United States Governmental Activities in the Field of Agricultural Economics Prior to 1913," Journal of Farm Economics. Vol. 10, Oct. 1928, pp. 429-60.

implementation of these recommendations meant an expansion in research and regulatory and service activities, frequently quite intermingled. 21/

Scientific Research Expanded

Scientific work had expanded rapidly after James Wilson became Secretary of Agriculture. Wilson had been able to obtain additional funds from Congress. In some instances work was conducted in the States, becoming a source of irritation to the experiment station directors, a situation that was to continue.

Shortly after he had become chief of the new Bureau of Plant Industry in 1901, Beverly T. Galloway attended the annual meeting of the land-grant college association. He had heard the committee on cooperation between the stations and USDA recommend that contacts be with and through the director of Experiment Station. Discretely, he was elected as an additional member of the committee. Problems continued. Two years later, representatives of the association met with "Tama Jim" to discuss the friction that had arisen from overlapping research and a lack of cooperation and mutual understanding. The Secretary appointed a committee composed of chiefs of the Bureaus of Plant Industry and Soils and the director of the Office of Experiment Stations. This, though it met several times in the next year, did not solve the problem, for the executive committee of the association complained of the Department's intruding in States' work. The committee then suggested that it be allowed to appear before the hearings of congressional committees. Moreover, it had met with and asked the President to appoint as an Assistant Secretary someone in sympathy with their views. 22/

These discussions at land-grant college association meetings became quite heated with the college presidents wanting to exclude technical people from the association. In 1903, the constitution of the association was revised, dividing it into twin sections: one on college work, composed of the college presidents and the other on stations' work, consisting of the directors but including all other station officers. The proponents for an expanded research program now had a stronger base from which to work. Although their land-grant college association had been in existence for nearly two

---

21/ United States Industrial Commission, Reports. 19 vol., 1900-02.Govt. Print. Off. Vol. 6. Distribution of Farm Products, 1901. Henry C. and Anne Dewees Taylor. The Story of Agricultural Economics. 1952, pp. 516-18.

22/ Nat. Assn. of State Univ. Proceedings. 1901, p. 62; 1904, pp. 17-19.

decades, the experiment stations had a firmer footing after the section on experiment stations was established. Shortly after this meeting W. A. Henry from the Wisconsin experiment station met with U.S. Congressman Henry Cullen Adams, telling him of the need for more Federal funds to enable the States to conduct fundamental research. Subsequently, A. C. True, the director of the Federal Office of Experiment Stations, and Adams drafted a bill that would have provided additional support for research. The association's executive committee added its endorsement and advice. Some members of Congress objected on the grounds that it would be paternalistic and that the States were not providing their fair share of the support. The States countered with statements of their support and that the work of the States should be supported rather than supplanted by a program of a centralized Federal department. 23/

In mid-January 1905, the executive committee attended hearings on agricultural education and experiment stations held by the House Committee on Agriculture. They described the achievements of the stations. However, they pointed out that scientific research in USDA had expanded at a rate quadruple to theirs and reasoned that it should be checked. Secretary Wilson was placed on the defensive. Rather astutely he explained his purpose of applying science to agriculture. He declared "I believe that the independence of the State experiment stations should be maintained." 24/

"Tama Jim" attended the 1905 meeting of the land-grant college association. This time he said that when he came to Washington he had intended to make the Department subservient to the stations. However, he found it necessary to strengthen the Department. He believed that the two should work together with USDA cooperating in broad and national questions. 25/

Such cooperation seemed quite possible when Willet M. Hays from the Minnesota experiment station was appointed in December 1904 as Assistant Secretary. Perhaps he had already had a tempering influence upon the Secretary. As time passed,

---

23/ Knoblauch and others. State Agricultural Experiment Stations. 1962, pp. 78-79, 96-100.

24/ U.S. Congress, House Committee on Agriculture. Hearing on Agricultural Colleges and Experiment Stations. Jan. 18, 1905. 58th Congress, 2nd Sess., pp. 16-17, 35-36.

25/ Nat. Assn. of State Univ. Proceedings. 1905, p. 15; Edward D. Eddy, Colleges for Our Land and Time. New York: Harper & Brothers, 1956, pp. 124-26.

he was to be remembered more for his interest in the budding economic and marketing studies of USDA than for his support of research in the experiment stations.

President Theodore Roosevelt signed the Adams Act on March 16, 1906. The act authorized an additional payment to each State or territory having an experiment station of $5,000 the first year and a cumulative annual increment of $2,000 until the maximum of $15,000, over and above Hatch Act funds, was reached. Each station was to make an annual report on its operations, its receipts, and expenditures to the respective governor of the State or territory, sending copies to the Secretaries of Agriculture and the Treasury. Thereafter, the Secretary of Agriculture was to certify that the station was complying with the act. The funds, as before, were to support original research or experiments bearing directly on the agricultural industry. 26/

With the much sought additional financial support came gradually some new directions in experiment station research that were paralleled in the Federal Department. The association, as its part in policymaking and implementation, appointed the Experiment Station Committee on Organization and Policy (ESCOP). The passage of the Adams Act was further evidence that Federal aid joined State aid in subsidizing research in the State stations, necessitating even closer cooperation between the Office of Experiment Stations and the States through ESCOP. 27/

When the passage of the Adams Act had seemed imminent, A. C. True wrote to the chairman of ESCOP suggesting a discussion of the act. Probable problems were considered and station directors were asked to suggest experiments to be undertaken, the prevention of competition, and the relation of USDA to the stations. While everyone agreed with the purpose of the legislation and the desirability of restricting the fund to original research, there was a lack of understanding. To many, the immediate responsibility was to the local farmer rather than to research. Moreover, there was a tendency to pursue projects too large or broad in scope and a lack of definiteness in the purpose or plan of work. The committee did not recommend specific lines of work, but made general recommendations. Investigations should lead to the establishment of principles of broad application; a few lines of work should be undertaken at a time; and the Washington office

26/ 34 Stat: 63.

27/ Charles E. Rosenberg. "The Adams Act and the Cause of Scientific Research," Agricultural History. Vol. 38, Jan. 1964. pp. 3-12; Office of Experiment Stations. Annual Report. 1916, p. 8.

should establish a project system to maintain some control over the work. 28/

At the next annual meeting in 1907, E. D. Ball, director of the Utah Experiment Station and later Assistant Secretary of Agriculture under Henry C. Wallace, spoke of the great opportunity for research and said that there was no need for friction since the stations wanted cooperation. 29/

The president at the same meeting appointed a commission, composed of two outside scientists, two from the association, and one from USDA, to study and report on how public money could best be used for scientific research and experimentation. Among other topics, the report stated that there should be a clearer definition of the fields of work of USDA and the State stations. It also reported that the States would basically be more interested in local agricultural problems, leaving appropriations by the national Government for more general investigations. 30/

This was the period when the farmers' institutes were popular and Seaman A. Knapp was expanding his demonstration work. Both of these were popular with farmers and State legislators. But they were not considered research activities and such expenditures were questioned under the Hatch and Adams Acts. As A. C. True administered the acts, he continued to follow a policy of influence rather than coercion. However, from time to time the director of the Federal Office of Experiment Stations would call the attention of the State directors to the fact that Hatch Act funds should not be used for non-research activities. In February 1909, he notified them that "beginning with July 1, 1909, it will be expected that all charges for extension work and printing of compilations will be eliminated from the Hatch fund account." 31/

28/ U.S. Department of Agriculture, Office of Experiment Stations. Report of the Committee on Experiment Station Organization and Policy. Expt. Stat. Cir. 71, 1907, 7 pp; U.S. Department of Agriculture, Office of Experiment Stations. Annual Report, 1916, p. 8.

29/ Nat. Assn. of State Univ. Proceedings. 1907, pp. 109-10.

30/ Knoblauch and others. State Agricultural Experiment Stations. 1962, pp. 124-26; Nat. Assn. of State Univ. Report of the Commission of Agricultural Research. 1908, 23 pp.

31/ Knoblauch and others. State Agricultural Experiment Stations. 1962, p. 113.

True knew fairly well what was happening, for the stations were providing him with information on their projects as well as submitting annual reports and cooperating with the visitors from USDA. He was, however, extremely cautious about divulging information to other States to such a degree that there was a call for a list of federally funded research projects. Some felt that this would reveal research secrets, but others felt that such a list would indicate duplication.

Another element that may have been involved was a shifting in direction that some of the research was taking. A number of the State stations, as well as some USDA bureaus, were preparing studies with an economic slant. In some instances they related to the development of an industry; growing and marketing of specific crops, livestock, or related products; cost of production; and the like. And of course these raised problems between those educated as scientists and those with training in economics. Thus, Henry C. Taylor from the University of Wisconsin defined the new field of agricultural economics as "that branch of agricultural science which treats of the manner or regulating the relations of the different elements composing the resources of the farmer." 32/

The American Farm Management Association became another center for discussion of research. It was organized at the 1910 Graduate School of Agriculture sponsored by the land-grant college association and the Office of Experiment Stations, USDA. In the early years there were many discussions about definitions and the scope of farm management, agricultural economics, and rural sociology. Generally, this society was quite separate from the land-grant college association that emphasized scientific research, education, and extension work. 33/

Along with this interest in economics and in finding markets for the crops which were increasing through scientific research

---

32/ Nat. Assn. of State Univ. Proceedings. 1913. pp. 26-39; H. C. Taylor to A. C. True, July 11, 1911. Gen. Corres., Off. Expt. Sta., RG. 164, NA.

33/ Taylor. The Story of Agricultural Economics. 1952, p. 84-98; Nat. Assn. of State Univ. Proceedings. 1912, pp. 166-73.

came a campaign for an agency within USDA to conduct marketing service and research. 34/

"Tama Jim's" 16 years in the Department were drawing to a close when provisions for marketing work were approved. David F. Houston, a political scientist, was the new Secretary of Agriculture. Beverly T. Galloway, formerly chief of the powerful Bureau of Plant Industry, was named Assistant Secretary of Agriculture. His appointment was in line with a 1912 recommendation adopted by the land-grant college association that a "man of scientific training and experience be appointed to supervise and coordinate scientific and educational work" of USDA in accordance with a definite and permanent policy. At any rate, he was to supervise scientific and regulatory work. 35/

Federal Marketing Work Formalized

On March 27, 1913, the Secretary and Assistant Secretary met with representatives of a number of bureaus to discuss work already accomplished pertaining to "marketing and distribution of farm products." Charles J. Brand who had been in Galloway's bureau working on cotton handling and marketing gave a very detailed discussion of his work that evidently made a good impression. 36/

The Office of Markets was set up on May 16, 1913, as part of the new Rural Organization Service, headed by Thomas Nixon Carver, an economist from Harvard University. Charles J. Brand was selected to head the new office. Within a year Carver returned full-time to teaching and the incipient sociological research was combined with Brand's in the Office of Markets and Rural Organization. Brand organized his work in projects, a system that he had been accustomed to in the Bureau of Plant Industry. Three main lines developed: research,

---

34/ G. L. Baker and others. Century of Service: the First 100 Years of the United States Department of Agriculture. U.S. Dept. Agr., 1963, pp. 57-61; Caroline B. Sherman. "The Legal Basis of the Marketing Work of the United States Department of Agriculture," Agricultural History. Vol. 11, Oct. 1937, pp. 289-301.

35/ Nat. Assn. of State Univ. Proceedings. 1912, pp. 96-98; Secretary's Memo. No. 3, Mar. 28, 1913. This series of memoranda were instituted in 1913 and have been continued to the present.

36/ U.S. Department of Agriculture. "Department Conference on the Marketing and Distribution of Farm Products," 1913, typed copy in National Agricultural Library. 1.9 M34D.

regulatory, and service, usually interrelated. Studies were of cooperative marketing associations, transportation and storage of farm products, marketing by parcel post, motor transportation of farm products, city marketing and distribution, and marketing methods and costs.

Meanwhile, the Secretary and the Assistant Secretary were reviewing other aspects of USDA's organization. Secretary Houston called a meeting for April 15, 1913, in the Department to discuss the questions "constantly arising regarding the relationships which should exist" between USDA, the State colleges, and experiment stations. And even before the meeting, he directed that a uniform policy necessitated that all such questions should be referred to the Office of the Secretary, via the Assistant Secretary. Then he instructed the bureaus, divisions, and offices to establish a uniform system of project statements. Between 1910 and 1920, planning and recording work of the experiment stations became fairly general. Moreover, there were some interbureau memoranda of understanding involving the State stations. In some instances, these were cleared by A. C. True, chief of the Office of Experiment Stations, and signed by the Secretary. 37/

When Secretary Houston appeared before the land-grant college association in November 1913, he presented his proposal for better coordination of activities in the States with those of USDA by an emphasis on centralization. Galloway proceeded to discuss his plan--a major reorganization of the Department into functional services: research, regulatory, States relations, forest, weather, and rural organization--abolishing the existing bureau system. To develop closer relations with the States, three joint committees would be appointed: (1) on relations with colleges and stations, (2) on projects, and (3) on publication of research. The third side of the Department's presentation seemed to be True's bibliographical report--a bibliography on rural economics literature. The association did provide for a joint committee on projects and correlation of research at this meeting. 38/

37/ Alfred C. True. A History of Agricultural Experimentation and Research in the United States, 1607-1925. p. 238; Secretary's Memo., No. 13, Apr. 14, 1913; No. 15, Apr. 19, 1913; No. 26, May 29, 1913; C. J. Brand to A. C. True, June 1, 1916 and Aug. 13, 1917; F. R. Harrison to C. J. Brand, June 17, 1917, RG 164, NA.

38/ Nat. Assn. of State Univ. Proceedings. 1913, pp. 19-23, 26-37, 117-21.

On January 31, 1914, a Departmental committee on projects was appointed and considered the reorganization proposals. Because of opposition, only the States Relations Service was established on July 1, 1915, with A. C. True as its director. Here were combined the Office of Experiment Stations, a newly established Office of Home Economics, and the extension activities. Research functions were transferred from the Office of Experiment Stations, except for that in the territorial experiment stations, to several bureaus. Bureau chiefs were encouraged to segregate research, regulatory, and service activities. 39/

The passage of the Smith-Lever Act in 1914 soon had its impact upon the experiment stations since the extension work was more popular. Staff members were more interested in it and States were more willing to support it. Then when the States Relations Service was established, True devoted most of his time to the extension work. During World War I, special funds went to extension work. Moreover, men were drafted or volunteered for military service or took more remunerative work, creating a manpower shortage. Wartime inflation cut into the real value of the States' funds from the Federal Government. During the war much of the research that was conducted dealt with increasing production and the conservation of food. The States were urged to review their work and postpone or discontinue lines of work that were not urgent. E. W. Allen, director of the Office of Experiment Stations, urged the station people to cooperate with extension people. The need for cooperation and coordination between States was necessary for maximum returns. 40/

The relations between USDA and the experiment stations were not improving. The efforts of the Committee on Projects did not seem to be effective. In its report the committee listed its goals: (1) to determine the location of waste and duplication, (2) recommend more effective and economic use of public funds, (3) suggest opportunities for correlating projects planned to solve similar problems, and (4) make recommendations for greater efficiency. Moreover, it was making a survey of State and Federal research projects.

The American Association for Advancement of Science showed its interest in the agricultural economics field when it established an agriculture section in 1914 and chose marketing as the topic

---

39/ Nat. Assn. of State Univ. Proceedings. 1915, p. 133; Secretary's Memo. No. 68, Jan. 31, 1914; No. 121, Mar. 10, 1915; No. 140, June 8, 1915.

40/ Nat. Assn. of State Univ. Proceedings. 1917, pp. 156-65; True. Agricultural Research. 1937, p. 237.

of its first symposium. The following year, in its meeting on the relation of science to meat production, a paper was presented on the economic aspects of meat production and marketing. Scientists and those interested in economic aspects represented USDA and served on committees of the section and on the National Research Council. 41/

On June 5, 1916, the Office of Markets and Rural Organization released the Results of a Survey of State Marketing Activities Throughout the United States. This no doubt had an impact in the organization of the National Association of State Commissioners, Secretaries, and Directors of Agriculture, which adopted as its first resolution the sponsoring of a plan for National, State, and local cooperation in marketing and distribution of farm products. Two years later it reported that the lines of work between USDA, the land-grant colleges, and the experiment stations were completely delineated. 42/

The annual meeting of the land-grant college association was held in January 1919 instead of late 1918. Again, the scope of research was a center of discussion. This time the primary question was whether it was proper to spend Hatch and Adams Act funds for research in agricultural economics and rural sociology. The consensus seemed to be that it had become more accepted, but it might be well to consider asking for additional funding for such work by the experiment stations. 43/

Several committees that Secretary Houston had appointed to survey various aspects of work that might be included in an expanded Bureau of Farm Management and Farm Economics reported in 1919. A common issue in the report of each was cooperative relations with the State colleges and experiment stations, but no mention was made of the Office of Experiment Stations. 44/ Moreover, at the next annual meeting of the land-grant college

---

41/ L. O. Howard to E. W. Allen, Apr. 14, 1914; E. W. Allen to L. H. Bailey, Dec. 7, 1914, Dec. 3, 1915, RG 164, NA.

42/ John Holton. Proceedings of the National Association of Commissioners, Secretaries, and Directors of Agriculture, 1916-1955. Georgia Department of Agriculture, 1960, viii, p. 120.

43/ Nat. Assn. of State Univ. Proceedings. Jan. 1919, pp. 211-17, 224-32.

44/ U.S. Department of Agriculture. Secretary's Cir. No. 132, 135, 138, 139, 1919; Nat. Assn. of State Univ. Proceedings. 1919, pp. 62-66, 237-47.

association, Henry C. Taylor, who had become chief of the reorganized Office of Farm Management and Farm Economics in USDA, discussed the parallelism in scientific and economic research, suggesting that his office coordinate the economic research. E. W. Allen, chief of the Office of Experiment Stations had complained that cooperative agreements on research that used to be filed in his office no longer came to him; that the Secretary (Houston) had never really been interested in correlation of research; and that the Joint Committee on Projects and Correlation of Research was inactive. The committee reported later that year that relations between Washington and the States were highly satisfactory while admitting that the emphasis had been placed on extension activities. 45/

The National Association of State Marketing Officials was organized in February 1920 when a group of marketing officials met in New York. Representatives from the U.S. Department of Agriculture included a number from the Bureaus of Markets and Plant Industry. Full membership was restricted to the head of each State marketing agency and the chief of the Bureau of Markets. Associate membership for others was at the discretion of the association's executive committee. Included in its goals to improve food distribution was the closer coordination of the activities of State marketing agencies with those of the U.S. Bureau of Markets. 46/

Research in the Early Twenties

Edwin T. Meredith, founder of Successful Farming, became Secretary of Agriculture upon Houston's appointment as Secretary of the Treasury in 1920. E. D. Ball, who had been with the Utah and Iowa experiment stations, was appointed as his Assistant Secretary. Meredith gave considerable attention to the need for strengthening USDA's research work when he testified before the House Appropriations Committee in late 1920, stressing the importance of shifting some of the emphasis to economic aspects. This would involve some reorganization of work and the appointment of directors of scientific and regulatory work. When the Secretary addressed the land-grant college association that year, he announced his endorsement of improved coordination of Federal-State relations.

The next appropriation request included a provision, supported by the association, for the two civil service positions. They

45/ Nat. Assn. of State Univ. Proceedings. 1919, pp. 62-66, 237-46; E. W. Allen to J. C. Kendall, Oct. 17, 1919, RG 164, NA.

46/ National Association of State Marketing Officials. Foods and Markets·Vol. 2, Albany, N.Y.: Feb. 1920, pp. 1-39.

were to develop a Department-wide program to coordinate research and similar lines of work in the States. The positions were authorized in the appropriation act, and a new Secretary, Henry C. Wallace, appointed E. D. Ball as director of scientific work. Already E. W. Allen, chief of the Office of Experiment Stations, had advocated the establishment of a central file on cooperative agreements. The association of State departments of agriculture, who were involved in some of the regulatory work and at times in research, continued to endorse the establishment of a uniform policy in their regulatory activities and cooperation with USDA. Its committee on marketing also had recommended that Congress provide funds to enable USDA to help States solve regional marketing problems. 47/

Postwar Agricultural Research

The postwar years were difficult. Research had been deemphasized during the war and extension work had become popular. Legislation had added a number of marketing services and regulatory activities that entailed some research. Lines of communication had broken down. The Secretary of Agriculture was concerned about this deemphasis and strongly supported the reinstatement of research. Realizing the havoc that inflation had imposed on research in the State experiment stations, members of the land-grant college association called for additional Federal funding to enable them to engage in farm management, marketing, and other economic studies, that some had been urging for a number of years. But one maverick suggested that the State experiment stations become an integral part of the USDA. 48/

A proposal to provide funds for research in agricultural economics, sociology, and home economics was introduced at the 1920 session of the land-grant college association, discussed, and a draft of proposed legislation prepared. Indiana's Congressman Fred S. Purnell introduced a bill for expanded research in State experiment stations and in the Department on January 17, 1921. He reintroduced it at the next session. Early the following year, the agriculture committee held hearings. There was some opposition to such

---

47/ U.S. Congress, House Committee on Appropriations. Hearings...Agricultural Appropriation. 1922, pp. 827-32, 842-43; U.S. Department of Agriculture, Annual Report of the Secretary. 1920, pp. 61-62; Secretary's Memo. No. 351, Sept. 29, 1921; E. W. Allen to F. B. Mumford, Mar. 23, 1921, RG 164, NA; John Holton. Proceedings of the National Association of Commissioners, Secretaries and Directors, 1960, pp. 161-62.

48/ Nat. Assn. of State Univ. Proceedings. 1920, pp. 90-103, 148-58.

an expansion of the Department. But State representatives believed that this was only "catching up" and moreover the expanded lines of work, economics, home economics, and sociology needed financial support. 49/

The question of research was considered by the Joint Commission of Agricultural Inquiry, established June 7, 1921, to survey the state of agriculture. Headed by Senator Anderson of Minnesota, it held hearings and submitted a four-part report to Congress late in 1921. It also recommended an expanded and coordinated research program for State departments of agriculture, the U.S. Department of Agriculture, and agricultural colleges. 50/

A more general meeting, the National Agricultural Conference, was held January 23 to 27, 1922, with a number of representatives from the agricultural colleges attending. Marketing of farm products and agricultural research and education were major topics for discussion. R. A. Pearson, formerly Assistant Secretary of Agriculture, said that a national policy for agricultural research should provide for more definite cooperation, certain supervision to assure proper use of public funds, more definite agreement on the respective fields of research for USDA and State experiment stations that would result in better coordination of work, and more joint efforts. The Committee on Agricultural Research and Education discussed funding for experiment station research. Finally, the Committee on the Coordination of State and Federal Legislation recommended the appointment of a continuing national agricultural advisory council that would, among other things, consider the coordination of State and Federal activities. 51/

Impending reorganization within USDA that would consolidate economic work in one agency, the Bureau of Agricultural Economics (BAE), was probably a factor in the organization of the New England Research Council on Marketing and Food Supply. In April 1922, Lloyd Tenny, who was to become

---

49/ U.S. Congress, House Committee on Agriculture. Hearings ...Endowment of Agricultural Experiment Stations. 67th Cong., 2nd. Sess. 1922, pp. 8, 13, 27-31, 77-79; Nat. Assn. of State Univ. Proceedings. 1921, pp. 163-67; 1925, pp. 63-68; A. C. True, Agricultural Experimentation and Research. 1937, pp. 274-76.

50/ U.S. Joint Commission on Agricultural Inquiry. Report. 67th Cong., 1st Sess., House Doc. 408, Oct. 15, 1921, Part 1, p. 11.

51/ National Agricultural Conference. Report. 67th Cong., 2nd Sess., House Doc. 195, 1922, pp. 121-29, 176-77, 182-84.

assistant chief of the new bureau in charge of marketing work, spoke before a group at the Boston Chamber of Commerce. According to Tenny, money was available for marketing research; however, the bureau was interested in working through one New England organization instead of with each State. The New England Research Council on Marketing and Food Supply was organized by representatives from agricultural colleges and universities, experiment stations, State agricultural or marketing agencies, and the Department. Participants in the new organization were interested in stimulating and coordinating studies of economic problems relating to the supply of food and other agricultural products of New England. Nevertheless, the sessions of the experiment station directors of the Northeastern States, who had been meeting since the Hatch Act was passed, were concerned essentially with planning and coordinating scientific research in their stations. The ties of the council and the Department especially the BAE, were strong with Bureau economists frequently speaking at annual sessions and serving as executive secretary. 52/

The Bureau of Agricultural Economics, established by the appropriation act on July 1, 1922, consolidated the work of the Bureau of Markets and Crop Estimates with the Office of Farm Management and Farm Economics. The new bureau was a conglomerate with service, regulatory, and research responsibilities. Divisions, however, were grouped under the headings of production, marketing, and administration. A number of the commodity marketing divisions had research sections that worked on specific commodities, while the Cost of Marketing Division had responsibility for more general studies. The Division of Statistical and Historical Research conducted studies of foreign marketing, historical aspects, marketing statistics, price analyses, and so forth. States were to be encouraged to maintain a complete organization for marketing work. The bureau would give assistance when needed and cooperate with the States in definite projects. 53/

52/ Roger B. Corbett. "The New England Research Council on Marketing and Food Supply." Mimeo. 1937, 12 pp. National Agricultural Library; Alden C. Manchester. "History of the New England Research Council on Marketing and Food Supply 1922-1952." Mimeo., 1952, 2 parts, Nat. Agr. Libr.; Nat. Assn. of State Univ. Proceedings. 1935, pp. 94-95.

53/ Lloyd Tenny to A. C. True, May 22, 1922, RG 164, NA; U.S. Joint Commission of Agricultural Inquiry. Report, 1922. Part 4, pp. 232-62; G. L. Baker and W. D. Rasmussen. "Economic Research in the Department of Agriculture, A Historical Perspective" Agricultural Economics Research. Vol. 27, (July-Oct. 1975), pp. 54-56.

It was not surprising that the land-grant college association's Committee on Projects and Correlation of Research reported in 1922 that the States should concern themselves with local questions, the Federal Government with international, national, or regional questions, and that areas in between could be handled by joint action of Federal and State research agencies. It also called attention to the desirability of Federal and State leaders consulting with each other before undertaking research. 54/

When E. D. Ball, Assistant Secretary of Agriculture, spoke at this meeting, he made his audience apprehensive. He spoke of unity and organization of the work into a national program in which each would respect the achievements of the other and of the possibility of interchange of personnel. Moreover, he suggested that probably one-half of the State and Federal projects were so superficial they could be discontinued. He also proposed closer cooperation with the increasing number of scientific research units of agricultural organizations and industry. 55/

The economists' viewpoint was expressed by W. A. Schoenfeld, assistant chief of BAE, in a session of the National Association of State Marketing Officials about a week later. He deplored the fact that the experiment stations were devoting so little attention to economics and sociology. Out of 4,770 projects listed by them, only 172 related to the newer disciplines. He invited those present to visit BAE and offered to assist them in planning research. Apparently, the Bureau went its separate way, cooperating with State departments of agriculture in economic research, or so the land-grant college association's Joint Committee on Projects and Correlation of Research reported in 1923. It urged USDA to recognize the State experiment stations as the appropriate research agencies. 56/

The long-awaited reorganization went into effect on July 1, 1923. The States Relations Service was abolished. The Bureau of Home Economics was established to incorporate the activities of the Office of Home Economics. Extension work was combined in the Extension Service (ES) under a director of extension work. The Office of Experiment Stations was placed under the director of scientific work and was charged with representing the Secretary of Agriculture in relations with the State experiment stations.

54/ Nat. Assn. of State Univ. Proceedings. 1922, p. 160.

55/ Nat. Assn. of State Univ. Proceedings. 1922, pp. 187-97.

56/ Nat. Assn. of State Mktng. Officials. Proceedings. 1922, pp. 37-42; Nat. Assn. of State Univ. Proceedings. 1937, p. 276.

Projects and programs of work were to be approved by the Washington office. 57/

Research Funded for Economics, Home Economics, and Sociology

The campaign for additional funding and authority continued at meetings of the land-grant college association, the American Farm Bureau Federation, the National Grange, and the American Bankers Association. Congressman Purnell introduced his bill for the third time on December 8, 1923. The association's executive committee took their plea to the White House and then to the President's Agricultural Conference in January 1925. The Conference endorsed the Purnell Bill. It was passed by Congress and signed by the President on February 24, 1925. 58/

The Purnell Act authorized the appropriation, in addition to already authorized funds, of $20,000 for the fiscal year ending June 30, 1926, and annual increments of $10,000 until June 30, 1930, when the appropriation would level off at $60,000 per annum. This money was to be used only for research relating to "production, manufacture, use, distribution, and marketing" including scientific research and economic and sociological investigations on improvement of rural homes and life; and for the publication of the results of the studies. Not more than 10 percent per annum was to be applied for the purchase or rental of land or for building construction, repair, or maintenance; misapplied funds were to be repaid before further authorized funds could be claimed. Again, the stations were to make annual reports to State governors and send copies to the Secretaries of Agriculture and Treasury. Then, on or before the beginning of each fiscal year, the Secretary of Agriculture was to certify to the Treasury Secretary as to the compliance of each State with the act to entitle it to its share of the appropriation. Finally, the Secretary was to report annually on the receipts, expenditures, and work of the State and territorial experiment stations.

Representatives of the colleges and experiment stations met in St. Louis in April 1925, to discuss policies and plans for the expanded work and its coordination with that in USDA. They established six major subjects around which it was to be organized. Subsequently, the executive committee of the

57/ Office of Experiment Stations. Annual Report. 1924, p. 1.

58/ A. C. True. Agricultural Experimentation and Research. 1937, pp. 274-76; U.S. Congress, House Committee on Agriculture. Hearings...Purnell Agricultural Experiment Stations Bill. 68th Cong., 1st Sess., Jan. 22, 1924, pp. 12-15; 43 Stat: 970-72.

land-grant college association appointed six advisory national research committees to draw up plans for each subject and its coordination and correlation. Among these was marketing and distribution of farm products. 59/

Secretary of Agriculture W. M. Jardine, who had been director of the Kansas experiment station, sent instructions for operations under the act in a letter to directors of the State stations May 20, 1925. In addition to new work, the funds might be used to strengthen appropriate work already underway. All projects supported in part or wholly by Federal funds were to be submitted to Washington for approval for suitability under the new legislation. Separate accounts were to be maintained on Purnell research and the project system would be used. The Office of Experiment Stations was to implement the act. Subsequently, Jardine instructed those responsible for cooperative projects with the State stations to confer with the chief of the Office of Experiment Stations or in case of conflict with the director of scientific work. Data on all projects was to be filed with the Office of Experiment Stations. 60/

Problems in administering the Purnell Act soon became apparent. Some States were cutting the funds they had been providing because of the availability of the additional Federal funds. They were reminded that the intent had been that the appropriated money was to supplement already available funds. The new home economics research was experiencing some difficulties. In some instances, other departments, such as chemistry, were intruding to such an extent that the Committee on Organization and Policy of the land-grant college association recommended that the initiation and organization of the home economics research should be in the home economics department or division, subject to the administrative direction of the State experiment station. A more basic difficulty was the lack of personnel trained in home economics. 61/

A similar strain was placed on the availability of agricultural economists, many of whom were being attracted to expanding BAE activities. E. W. Allen, chief of the Office of Experiment Stations, urged State directors to be cautious

---

59/ U.S. Department of Agriculture. Press release 890-25. Apr. 21, 1925; Nat. Assn. of State Univ. Proceedings. 1926, pp. 201-15, 386-88.

60/ Secretary's Memo., No. 561, Oct. 27, 1926.

61/ Nat. Assn. of State Univ. Proceedings. 1925, pp. 376, 381-82; 1926, pp. 166-67; 1927, pp. 405-06; Office of Experiment Stations. Annual Report. 1925, pp. 3-4.

about establishing more projects than could be adequately staffed. 62/

The Purnell Act meant more than added funds. Along with the broadened scope of research, it involved the selection of new personnel, greater definiteness of projects, the fitting of the new work into the overall plan of the experiment stations, and increased salaries. Ninety-six new projects in home economics were undertaken during the first year and 234 in agricultural economics with 43 in marketing research. The following year, the total for agricultural economics increased to 443, with 101 in marketing research. However, there were definite holes. Some work was on an informal basis with oral agreements or correspondence instead of definite memoranda of agreement. Information on USDA's projects outside of Washington needed to be more definite. Cooperation frequently was in name only. Surprisingly though, the land-grant college association's Joint Committee on Projects and Correlation of Research commended the American Farm Economic Association, the Social Science Research Council, and the American Home Economics Association for their support of the new research. But events were highlighting the need for its coordination with production research. 63/

Concurrent with the passage of the Purnell Act was a movement by the agricultural economists to evaluate their research area. The American Farm Economic Association provided this focus in its 1927 meeting and in its journal. Its news notes included many entries concerning cooperative research between experiment stations and the Bureau, groups of experiment stations, or between the States and other USDA agencies. 64/

62/ E. W. Allen. "The Growth of Economic Research," Journal of Farm Economics. Vol. 9, July 1927 pp. 346-56; E. D. Eddy. Colleges for Our Land and Time. New York: Harper and Bro., 1957, pp. 166-72.

63/ "Report of the Advisory Committee on Research in Agricultural Economics," Journal of Farm Economics. Vol. 9, Jan. 1927, pp. 111-29; E. W. Allen. "Some Features of the First Year Under the Purnell Act." Nat. Assn. of State Univ. Proceedings. 1926, pp. 158, 161; Walter H. Evans. "The First Five Years of the Purnell Act." Nat. Assn. of State Univ. Proceedings. 1930, pp. 224-31.

64/ Henry C. Taylor, "Research in Agricultural Economics," Journal of Farm Economics. Vol. 10, Jan. 1927, pp. 33-41; John D. Black. "Research in Prices of Farm Products," Journal of Farm Economics. Vol. 10, Jan. 1927, pp. 42-67; J. I. Falconer. "Research in Agricultural Income," Journal of Farm Economics. Vol. 10, 1927, pp. 71-80.

Economic work of USDA was further expanded when the Cooperative Marketing Act was approved on July 2, 1926. This created a Division of Cooperative Marketing in place of the Division of Agricultural Cooperation. The new division, reflecting the increased interest in solving agricultural problems through cooperative marketing, was to actively promote such endeavors along with its research. 65/

Rural sociology, another area of research expanded under the Purnell Act, had had its roots in rural organization studies of the Office and Bureau of Markets and in C. J. Galpin's research at the University of Wisconsin. His "Social Anatomy of an Agricultural Community" has been described as the first experiment station bulletin for the field. Following its publication in 1915, further studies appeared in a rather haphazard manner until the 1919 reorganization of the Office of Farm Management. Then "rural life studies" were placed under C. J. Galpin in a separate section in the enlarged office. It conducted or cooperated with colleges in about 70 studies of rural life prior to the passage of the Purnell Act. In 1928, Galpin and several associates prepared a list of studies at land-grant colleges for the Social Science Research Council. Galpin's division of farm population was involved in 33 of the 56 projects at land-grant colleges. 66/

Another approach to research was proposed by Victor Christgau, Representative from Minnesota, in a bill introduced in the House of Representatives on June 30, 1930. This bill would have provided for regional councils composed of experiment station directors. However, some research workers would have been working under the direction of the councils rather than the States. The bill was referred to the Committee on Agriculture and died there. 67/

65/ Gladys Baker and others. Century of Service. 1963, pp. 128-29; U.S. Bureau of Agricultural Economics. Annual Report. 1926, pp. 34-36.

66/ Carl C. Taylor. "Research in Rural Sociology," American Journal of Sociology, Vol. 33, Sept. 1927, pp. 211-21; C. J. Galpin and others. "Rural Sociological Research in the United States." Social Science Research Monograph, 1928. Mimeo., 114 pp.

67/ U.S. Congress. H.R. 13275. 71st Cong., 2nd Sess.; U.S. Department of Agriculture. Press release 895-36. Nov. 18, 1935.

As the land-grant college association's committees evaluated the expanded research, they found that out of 7,000 projects conducted by State stations, 999 were in cooperation with other stations or with USDA, an increase of 110 over the previous year with nearly another hundred completed or terminated. Of these, 176 station projects in agricultural economics and rural sociology were supported by stations in cooperation with the BAE. There were a number of regional projects involving groups of stations from three to over 30 and including one to three USDA bureaus. While the stations heralded the existence of the principles of coordination and correlation, they proposed that a committee be appointed to make an intensive study of cooperative relations between a station or a group of stations and USDA. They also recommended that the six major fields of studies selected in 1925 be discontinued and that major coordinate fields of regional or national cooperative effort be defined. Essentially, the special research committees that had been established after the St. Louis conference disappeared. The home economics people were also calling for refinement and redirection of research that had been hurriedly instituted to utilize funds available under the Purnell Act. And, Albert F. Woods, who had become director of scientific work, was still in mid-1931 trying to get the bureaus to send him copies of all cooperative agreements. 68/

The American Farm Economic Association met jointly again with the National Association of State Marketing Officials in 1931. They chose as the theme of their meeting "Marketing in Practice, in Research, in Teaching," discussing the needs, changes taking place, and the challenges as seen from the economic viewpoint. For there were those who were looking to marketing to solve the agricultural problems. 69/

The depression deepened in 1932, uncovering weaknesses in marketing structures and processes. Under these circumstances, BAE's research took on added importance. With the virtual disappearance of foreign markets, the home market increased in importance. Therefore, research was geared to studying changing demand, new uses for cotton, marketing margins,

---

68/ Nat. Assn. of State Univ. Proceedings. 1930, pp. 237-38, 267-68, 413-14; A. F. Woods to C. W. Kitchen, May 27, 1931, RG 164, NA.

69/ Nat. Assn. of Mktng. Officials. Proceedings. 1931, pp. 16-31.

relationship of price and quality, marketing methods, and costs of marketing. 70/

By the time the 1932 land-grant college association met, State experiment stations had seen their legislatures cut the State appropriations, but fortunately the Federal funds had been set by law. They had reacted by lowering salary scales and using Federal funds to cover operations. Some of the reactions at the meeting of the Committee on Federal-State Relations varied from outright antipathy to USDA to passive acceptance. The old complaint surfaced that the Department should notify the station director in advance of all research to be undertaken. Moreover, they felt that USDA should avoid establishing field stations insofar as possible and when necessary they should be administered in cooperation with State stations. There was a strong feeling that Washington had been smothering research in the States; if it continued, the resources of the Federal Government and the States would be joined in a federalized system for agricultural research. The USDA role should be that of an advisor, contributor, and coordinator. The stations favored a uniform memorandum of agreement for all USDA bureaus that would be cleared through the Office of Experiment Stations. Then if the right men were selected for leadership positions in the national and State research agencies effective cooperation would result. 71/

Research During the New Deal

A new administration came to Washington in 1933. The ensuing years were to see a whole new direction in USDA activities. But there were also continuing trends. An Executive Order provided that projects supported by funds under the Hatch Act, the Adams Act, and the Purnell Act were to be approved by the Office of Experiment Stations. USDA agencies carefully reviewed cooperative projects, completing or terminating some, cutting some, and readjusting others to meet emergency needs. 72/

Marked progress had been made, according to the report of the Experiment Station Organization and Policy Committee, in coordinating the research of the station network. But problems were changing rather than constant. More interstate cooperation was recommended. When C. P. Blackwell of the New Jersey station reviewed the research picture in 1933, he

---

70/ U.S. Bureau of Agricultural Economics. Annual Report. 1932, pp. 25-31.

71/ Nat. Assn. of State Univ. Proceedings. 1931, pp. 514-22; 1932, pp. 279-80.

72/ Office of Experiment Stations. Annual Report. 1933, p. 1; Nat. Assn. of State Univ. Proceedings. 1933, pp. 166-68; U.S. Bur. of Agr. Econ. Annual Report. 1933, p. 1.

saw that there had been an 87.3-percent increase in the number of projects registered in the Office of Experiment Stations between 1919 and 1930. He attributed much of this to work in rural sociology and agricultural economics. 73/

The report of the Committee on Federal-States Relations did not eliminate problem areas in the relationship with USDA. It had no solution to the danger of undue subordination of the experiment stations in national programs. It did not discuss the question of smoothing relationships between the bureaus and the States. The Department agreed to a general memorandum of agreement covering cooperative research. 74/

The first year of Henry A. Wallace's administration had been filled with the challenges of inaugurating new action programs. Some changes were made in 1934. Among these was the abolition of the position of director of scientific work when A. F. Woods retired. Although he had been made directly responsible to the Secretary he had been unable to have much impact on the scientific bureaus. They had continued their independent courses of action much as they had in 1915 when threatened with the establishment of a research service. This did not mean, however, that the Secretary was not concerned about an efficient research system. He asked bureau chiefs to coordinate their research with investigations at the State stations to avoid duplication of effort. The Office of Experiment Stations was continuing to maintain its file on research in the stations, regardless of whether it was State or federally supported. It found little unwarranted duplication in the research of the stations and USDA. The office reported that progress was being made in promoting local, regional, and national teamwork on larger and more urgent rural problems and policies. 75/

The Secretary's Office, however, was aware of one of the loopholes in procedures--a central file on all Departmental projects. Several attempts had been made previously to this end, but they had faded away. Therefore, early in 1934, bureau chiefs were asked to comment on a uniform project system to fill the void. A committee was appointed on January 5, 1935, to oversee the establishment of this central file in the Office of Budget and Finance. Initially, the reported units

---

73/ Nat. Assn. of State Univ. Proceedings. 1933, p. 121.

74/ Nat. Assn. of State Univ. Proceedings. 1933, pp. 159-62.

75/ Office of Experiment Stations. Annual Report. 1934, pp. 2-3.

were large work projects and included research as well as administrative and service activities. Subsequently, these were broken down into line projects. The records, while especially valuable for fiscal and administrative control, were also useful in coordinating research. They were transferred to the Agricultural Research Administration (ARA) when it was directed to maintain a central project file. 76/

Reports at the 1934 land grant college association meetings continued to give considerable attention to correlation and coordination of research. The Committee on Federal-States Relations asked the Committee on Projects and Correlation to assume its activities. The Office of Experiment Stations had a fairly good picture of State research, but information on that of the bureaus was less complete. Once again, the Committee on Projects reported that Federal emergency funds had in part offset the reduction in State funds. 77/

Another development in late 1934 was the establishment of a new Division of Marketing Research, within BAE, under the leadership of Frederick V. Waugh. He had previously served as the executive secretary of the New England Research Council. As he looked at his new area of concern, he saw two problems: (1) marketing research had been local in character without coordination leading to regional or national conclusions and (2) specialization had been given to commodities instead of to functions or institutions. He was eager to coordinate his work with that of the experiment stations and other Federal agencies. As time passed, the research in his division became more general, while the commodity divisions continued to conduct more of the commodity-related or technological research. 78/

76/ R. G. Tugwell to chiefs of bureaus, Jan. 18, 1934; E. N. Bressman to Nils Olsen, May 5, 1934; H. A. Wallace to chiefs of bureaus, Jan. 8, 1935; Manual on Uniform Project System, Mar. 1937, Secretary's Files, RG 16, NA; Secretary's Memo., No. 657, Jan. 7, 1935; U.S. Department of Agriculture. Administrative Regulations. 1924, Sect. 645-47; U.S. Department of Agriculture, Director of Finance. Annual Report. 1936, pp. 2-3.

77/ Nat. Assn. of State Univ. Proceedings. 1934, pp. 48-164.

78/ F. V. Waugh. "Urgent Needs for Research in Marketing Fruits and Vegetables." Journal of Farm Economics. Vol. 18, May 1936. pp. 405-18; Baker and Rasmussen. "Economic Research," 1975, p. 58.

The first step, which was to result in additional financing for research in USDA and State experiment stations, came when Congressman Marvin Jones introduced on February 22, 1935, a bill for this purpose as well as for extension activities. He reintroduced the bill on March 25 and again on April 1, 1935. Hearings were held at which tables were displayed showing the decrease in funds for the stations, with the State proportion decreasing from about two thirds to one third. 79/

Expanded Research Under the Bankhead-Jones Act

The Bankhead-Jones Act providing for expanded research was approved on June 29, 1935. Title I authorized work for improving the quality, new uses, and markets for agricultural commodities and research relating to conservation, development, and agricultural use of land and water resources. The Secretary of Agriculture was authorized to encourage similar research at State agricultural experiment stations. Funds appropriated for State research were designated as the Special Research Fund. Any use of this fund required the approval in writing of the Secretary of Agriculture. One-half of this fund was to be used to establish regional laboratories in the principal agricultural regions; the remainder was to be available for similar research in State and territorial stations upon the basis of rural population. 80/

Four regional meetings were held in August and September 1935, in Ames, Iowa; Logan, Utah; Athens, Georgia; and Storrs, Connecticut. Then on September 11, the Secretary of Agriculture issued a memorandum to the experiment station directors on the administration of the Bankhead-Jones Act. He directed the Office of Experiment Stations to administer it. States were to submit their proposals for advance clearance. Research was to be new and not just shifted to the new funds because of their availability. Separate records were to be kept on this new research and an annual report was to be made.

To take full advantage of funds that were available to USDA for special research, Secretary Wallace asked M. L. Wilson, his Assistant Secretary, to serve as chairman of a special committee. This committee reviewed suggestions from the bureaus and outside individuals. With the cooperation of the bureaus and in conference with the Secretary, the projects were

---

79/ U.S. Congress, House Committee on Agriculture. Hearings ...Advancement of Agriculture. 74th Cong., 1st Sess., 1935, pp. 25-26; U.S. Congress, Senate Committee on Agriculture and Forestry, Hearings...Development of Agricultural Extension Work. 74th Cong., 1st Sess., 1935, pp. 55-58.

80/ 49 Stat: 436-39; Eddy. Colleges for Our Land and Time. 1957, pp. 169-74.

selected. As the projects were developed every effort was made to secure the cooperation of research workers regardless of organizational lines; thus, for example, the Bureaus of Agricultural Engineering, Agricultural Economics, and Plant Industry were cooperating as well as the Office of Experiment Stations. Some of the workers in the State stations were appointed as collaborators, enabling them to draw on Federal funds for out-of-State travel to regional meetings frequently prohibited by States. 81/

Considerable attention was given to the administration of the act when the land-grant college association met in 1935. M. L. Wilson discussed the regional approach to agricultural research. While he claimed that such regional studies had existed for a half a century, he pointed out that the new long-term program of balance and adjustment would mean cooperation in agricultural planning that must rest on research. He advocated that the Office of Experiment Stations be expanded and that a national research council or board be established. He suggested that all research projects of USDA and the stations, except for emergency work, be submitted to the new council for review. This would combat duplication and waste and improve the quality of research through regional cooperation. A corollary to this would be research guilds composed of highly technical workers. 82/

F. B. Mumford of Missouri wanted the Secretary of Agriculture to consult the experiment stations on the location of the regional laboratories. James T. Jardine, chief of the Office of Experiment Stations, affirmed that the work would be cooperative. Then A. G. Black, chief of the BAE, discussed some of the marketing problems that did not fit the old commodity or local pattern--organization of marketing, consumption of and demand for farm products, and State and local barriers to trade. 83/

Eric Englund, assistant chief of BAE, went a bit further in his speech before the American Farm Economic Association a little later in 1935 when he emphasized the need for a national program of marketing research. This would be drawn

---

81/ Office of Experiment Stations. Annual Report. 1936, pp. 6-7.

82/ U.S. Department of Agriculture. Press release 895-36, Nov. 18, 1935.

83/ Nat. Assn. of State Univ. Proceedings. 1935, pp. 96-97, 162, 184-88, 196-204.

up with State and Federal marketing economists deciding upon a few important regional and national problems. He cautioned, however, that in the concern for organizing and coordinating research, there was a danger of devitalization through over organization and spending too much on tasks only indirectly related to research projects. He hoped that the Department and the stations might organize other research councils patterned after the New England Research Council. 84/

Secretary Wallace indicated the need for general direction of the research work when he appointed the chief of the Office of Experiment Stations as director of research on March 16, 1936. He was to have general direction of planning, developing, and coordinating all research programs of the Department. As chief of the Office of Experiment Stations he was to coordinate this with that of the experiment stations. 85/

The land-grant college Committee on Projects and Correlation reported at the association's next meeting that the new regional research laboratories were stimulating cooperative research projects. Final determination of the plan of work for the regional laboratories followed the recommendations of the State directors and representatives of USDA Bureaus. Some had advisory councils that furthered coordination. The vegetable laboratory had been established in 1935 near Charleston, South Carolina, in cooperation with 13 Southeastern States. The pasture research laboratory was established in 1936 at State College (now University Park), Pennsylvania, with 12 Northeastern States cooperating. The soybean industrial products laboratory was also organized in 1936 at Urbana, Illinois, with 12 experiment stations of the North-Central States cooperating. 86/

The Secretary met with the executive committee to discuss the increasingly complex problems of Federal-State relations. As an outcome of this he asked M. L. Wilson and Milton Eisenhower

---

84/ Eric Englund. "A Future Pattern of Research in Agricultural Economics." Journal of Farm Economics. Vol. 18, May 1936, pp. 280-92; Laurence A. Bevin. "Coordinating Research and Service in Marketing," Proceedings. Nat. Assn. of Mktng. Officials. 1932, pp. 17-19.

85/ U.S. Department of Agriculture. Secretary's Memo., No. 689, Mar. 16, 1936.

86/ Nat. Assn. of State Univ. Proceedings. 1936, p. 324; Office of Experiment Stations. Annual Report. 1938, pp. 4-5.

to serve as a committee to survey the situation from the Department's point of view and then make recommendations. 87/

The Secretary appointed an advisory committee on research, composed of the chiefs of the Bureaus of Plant Industry, Chemistry and Soils, Animal Industry, and Entomology and Plant Quarantine in April 1937. While not giving it an explicit mission, the Secretary hoped it would call to his attention any research problems that required consideration or action by his office. Then a uniform project system was established in the Office of Budget and Finance, occupying a room in the Administration Building. Each file included a statement of the purpose and history of the project, reports, project statements, and so forth. Also, in September 1937, the BAE established regional offices to facilitate the increasing amount of field work. These were abolished in 1946, in accordance with provisions of the Appropriation Act. 88/

Other regional research laboratories were established under the Bankhead-Jones Act until in 1939 there were nine. While they were regional from an administrative point of view, their scope was national as time passed. Thus, 1937 saw the establishment of the swine breeding laboratory at Ames, Iowa, and one at Auburn, Alabama, to study diseases and parasites of domestic animals. One was established in Riverside, California, in 1938 to study salinity of irrigation water and then another in East Lansing, Michigan, to work with poultry. The ninth laboratory, set up in 1939 at Ithaca, New York, was to concentrate on the relation of soils to plant, animal, and human nutrition. 89/

Utilization Research Laboratories

The Agricultural Adjustment Act of 1938, Title II, Section 202, provided for additional regional research laboratories to develop new uses for agricultural commodities. USDA and the State stations had previously done some such research, but this new authorization would provide for research into new uses for agricultural commodities, thereby opening new channels for marketing agricultural surpluses. Secretary

87/ Secretary's Memo., No. 701, Dec. 3, 1936.

88/ Secretary's Memo., No, 716, Apr. 9, 1937; U.S. Congress, House Committee on Appropriations. Hearings...Agricultural Appropriations, 1938. Pp. 96-100; BAE News. Sept. 15, 1937; Memo. of chief of BAE to assistant chiefs, June 24, 1946, RG 83, NA.

89/ Office of Experiment Stations. Annual Report. 1938, pp. 4-8; 1940, p. 6.

Wallace appointed a committee on July 14, 1938, to make a survey of all activities relating to industrial uses of agricultural products, including USDA, other Federal agencies, State experiment stations, and industrial organizations. The committee was to report on suitable locations for the laboratories and recommend the scope of investigations and ways of coordinating this research with other related activities. Members of the committee visited some 1,300 research laboratories. Wallace submitted the committee's report to the Senate on April 15, 1939. The Department had held regional conferences to discuss the work of each of the laboratories and its relationship to similar research elsewhere. Experiment station directors were asked to review their research to determine which parts should be coordinated with that of the laboratories. Laboratories were established in Peoria, Illinois; New Orleans, Louisiana; Wyndmoor, Pennsylvania; and Albany, California. The laboratories were directed by a special assistant chief of the Bureau of Agricultural Chemistry and Engineering, under the general supervision of the director of research. Outbreak of the war in Europe, with indirect and then direct U.S. involvement, resulted in the concentration of the laboratories on war-related research. 90/

While not all of the laboratories had cooperative agreements with State experiment stations, there was an agricultural experiment stations relations committee composed of the directors of the stations in the region and the director of the laboratory. They met once a year to review plans and discuss policy matters. There were also periodic meetings for the technical representatives of the stations.

The year 1938 brought a major reorganization within the Department of Agriculture. On October 6, the Secretary announced the grouping of marketing, regulatory, and service activities in a new Agricultural Marketing Service, formally constituted on July 1, 1939. A director of marketing and regulatory work was appointed. Initially, the Division of Marketing Research was transferred, but the transfer was cancelled and the division remained an integral part of the BAE. The reconstituted bureau was the central program planning agency for the Department and was responsible for economic research. The Division of Marketing Research was combined with

---

90/ Secretary's Memo., No. 765, July 14, 1938, No. 774, July 1, 1938; Report of the Secretary of Agriculture. 1938, pp. 114-19; 1939, pp. 139-43, 1941, pp. 166-74; 52 Stat. 37.

the Transportation Research Division on July 1, 1939, to form the Marketing and Transportation Research Division of BAE. 91/

Marketing research was one of the special areas of reporting at the 1938 meeting of the land-grant college association. Chris Christenson, director of the Wisconsin experiment station, called for a national research program in marketing and distribution of agricultural commodities. A special Committee on a National Program of Marketing Research met with the Secretary of Agriculture and the chiefs of the BAE and the Division of Marketing Research. The committee recommended that regional committees or groups be established. Some would plan and supervise research on marketing certain commodities, while others would work on general problems such as transportation costs, rates, policies, or market structure involving many commodities or States. These committees would meet with the staff in USDA to plan the work and coordinate the findings. The Secretary designated the chief of the combined Division of Marketing and Transportation Research as the Department's representative. 92/

The workload in the Office of Experiment Stations was growing rapidly. The Office was reviewing an increasing number of cooperative research agreements between USDA bureaus and experiment stations. During the 1939 fiscal year, these were reported to have reached nearly 1,400, making the maintenance of its files a mammoth undertaking. Nonetheless, the complaint continued at the annual meeting of the land-grant college association that there was a need for improved cooperation and coordination between departments within the experiment stations, between stations within a region, and between stations and the various divisions of the Department of Agriculture. 93/

Meanwhile, the State commissioners of agriculture endorsed a marketing bill then under consideration in the U.S. Senate. A special marketing committee was appointed to promote this legislation. However, the American Farm Bureau Federation

---

91/ Secretary's Memo., No. 782 and 783, Oct. 6, 1938; U.S. Bureau of Agricultural Economics. Annual Report. 1939, p. 3.

92/ Nat. Assn. of State Univ. Proceedings. 1938, pp. 337-38; 1939, pp. 312-14; 1940, p. 140.

93/ Nat. Assn. of State Univ. Proceedings. 1938, pp. 177-81; 1939, pp. 130, 289; Office of Experiment Stations. Annual Report. 1940, pp. 1-2.

and the land-grant college association opposed it, suspicious that the State departments were about to enter the research and education field. Although another bill was introduced in the House of Representatives and hearings were held, the bill was held in the committee on agriculture. Again the college and experiment station association opposed the bill, recommending that it should provide a clear separation between the colleges, experiment stations, and State departments of agriculture. 94/

The State experiment stations had profited by the extension and expansion of many emergency projects begun by the Department as recovery measures and then refocused on aspects of an economically adjusted and planned agriculture. 95/

Feeling that perhaps it must offer suggestions for new directions in research supported by congressional action, ESCOP's report at the 1940 meeting of the land-grant college association included a number of suggestions. It recommended that it be authorized to prepare materials on research needs of the stations to be submitted to the Secretary of Agriculture, that it present the view of the stations to the Bureau of the Budget for consideration in USDA's appropriation, and that it cooperate with the executive committee of the association in appearing before the House and Senate appropriation hearings. The executive committee, for its part, urged that additional appropriations for marketing research were needed. It also recommended that a new joint committee on coordination be appointed composed of two members from USDA, two from the land-grant colleges, two from the State commissioners of agriculture, and one from each of the four major farm organizations. The committee would review and advise on the program for the succeeding year. 96/

Impact of the War on Research

The impact of the war in Europe and our national defense program was felt in research activities. The various bureaus and experiment stations adjusted their research programs to concentrate more on defense and war-related activities. Some projects were terminated. However, caution was exercised to guard against the loss of long-term experiments. By 1941, one-third of the time and money allocated to marketing and transportation research in the BAE was spent on problems

94/ National Assn. of Marktng. Officials. Proceedings. 1941, pp. 72-74; Knoblauch, and others. State Agricultural Experiment Stations. 1962, p. 176.

95/ Nat. Assn. of State Univ. Proceedings. 1940, p. 304.

96/ Nat. Assn. of State Univ. Proceedings. 1940, pp. 254-55, 281.

relating to the defense program. The emergency funds supported more regional projects and necessitated more interstate coordination of research. The director of research reported continued work with the various bureaus and with the Secretary on research policies, procedures, and relationships and clarification of interbureau work. 97/

A major reorganization of USDA was announced 6 days after Pearl Harbor. This was formalized by Executive Order 9069, dated February 23, 1942. This provided for an Agricultural Research Administration in which USDA's six scientific bureaus and the Office of Experiment Stations were grouped. The administrator assumed the functions of the former director of research to coordinate scientific research. The Administration maintained the central project file covering all research but BAE was to coordinate economic and statistical research.

The 1942 annual meeting of the land-grant college association provided an opportunity for a review of the Federal grants to the experiment stations. Here it was noted that Congress had not appropriated the final increment due for the last 2 years for research under the Bankhead-Jones Act and there was a threat that other funds might be cut. As its part in reorganization, the association merged the Joint Committee on Projects and Correlation of Research with the Committee on Experiment Station Organization and Policy to form the Committee on Agricultural Experiment Station Organization and Policy. 98/

As the United States moved into defense and war-related expansion, attention was directed to postdefense or postwar activities that would offset the impact of a transitional period and prevent the recurrence of the post World War I situation. Under Executive Order 8455, signed June 26, 1940, some USDA agencies submitted proposals to the National Resources Planning Board, that would provide work for the unemployed. In response to instructions on July 9, 1940, from the Agricultural Program Board, an Interbureau Coordinating Committee on the Impact of the War and the Defense Program on Agriculture submitted a detailed report to the Secretary on October 8, 1940.

97/ U.S. Bureau of Agricultural Economics. Annual Report. 1941, p. 23; Office of Experiment Stations. Annual Report. 1941, pp. 21-24; 1942, p. 11; R. L. Mighell. Research in Interregional Competition. U.S. Bur. Agr. Econ., Apr. 1941, p. 30.

98/ Nat. Assn. of State Univ. Proceedings. 1942, pp. 127-28, 215.

This recommended that an Interbureau Coordinating Committee be appointed that would plan for the postdefense period. On January 8, 1941, the Secretary asked bureau chiefs to have State land use planning committees draft recommendations for action to meet impacts of the war. Regional conferences were held with a session on marketing and distribution that recommended that USDA intensify efforts to improve marketing and distribution systems. In response to a request from the White House, Secretary Wickard reported on May 31, 1941, that he had designated an Interbureau Coordinating Committee on Post Defense Planning that would integrate the program on a national basis. USDA agencies would be represented on the committee and regional subcommittees would work with State and local groups. 99/

While the primary emphasis in the Secretary's Memorandum that established the committee was on planning that would provide employment in the postdefense period, Wickard concluded that "planning for the world we wish to live in when the peace comes is actually a part of the defense effort itself," and discussions continued to be broad in scope. The committee initially was divided into three groups: economic, public works, and rural welfare, with a steering committee to coordinate activities. Among the early projects selected were rural and urban markets and it was recommended that USDA give attention to the improvement of marketing and distribution. 100/

However, much of the postdefense planning by the regional committees had included no provision for direct involvement of college representatives. In mid-October 1941, Secretary Wickard suggested that there be one representative of the land-grant colleges on each of the regional committees. In turn, the land-grant college association suggested that there be a joint committee of the association and USDA. Although the Secretary appointed three representatives to discuss the matter, little happened. 101/

99/ C. R. Wickard to bureau chiefs, Jan. 8, 1941, C. R. Wickard to the President, May 31, 1941, Secretary's Corres., RG 16, NA; Secretary's Memo. No. 913, May 31, 1941; Suppl. 1, Sept. 17, 1941; U.S. Department of Agriculture. "Agriculture's Plans to Aid in Defense and Meet the Impacts of War." Mimeo., July 1941. Copy in Nat. Agr. Libr.

100/ Minutes of Meeting with Luther Gulick and John D. Millett, July 31, 1941; Roy Kimmel to all regional chairmen, Nov. 15, 1941, Gen. Corres., BAE, RG 83, NA.

101/ C. R. Wickard to C. L. Ladd, Oct. 18, 1941; James D. Hoskins to C. R. Wickard, Jan. 26, 1942; M. L. Wilson to Carl Hamilton, Nov. 30, 1942, Secretary's Corres., RG 16, NA.

With the outbreak of the war, greater attention was given to increasing productive capacity to meet emergency requirements. Postwar planning continued at the Washington and regional level, but was not to be pressed at the county level. There was an undercurrent that farmers needed to be reassured that the Department was working to aid their postwar readjustments. A number felt that it was part and parcel of planning for war production. Then in August 1942, when the regional chairmen met in St. Louis, a program of work was drawn up; not only were USDA agencies and land-grant colleges to be involved, but farmer participation was to be sought. 102/

Increases in production, development of new processing methods, price ceilings and rationing, retail practices, and marketing margins served as stimuli for renewed interest in marketing research as exemplified in the paper by F. L. Thomsen for the meeting of the American Farm Economic Association scheduled for December 1942. Profitting by the mistakes of the past, he hoped that marketing research would become more problem oriented with greater coordination of effort and utilization of modern research techniques. 103/

No doubt President Roosevelt's letter to heads of departments and agencies, May 22, 1943, prompted a new look at proposals for postwar work and planning. When representatives of the land-grant colleges and USDA met in July they emphasized the need for close cooperation. Some of the most acute problems on the food front would be in marketing and distribution. The regional committees had some representatives from the colleges and again the suggestions for a joint committee surfaced. But those attending felt that the colleges should take the lead in organizing State committees. 104/

Fred Waugh became national activity leader for marketing and distribution work and when projects were established, F. L. Thomsen, chief of the Marketing and Transportation Division of BAE headed one on postwar readjustments in processing and marketing facilities and methods. Regional activity leaders were to work with the Washington leaders in drawing up work

---

102/ Roy Kimmel to all regional chairmen, June 1, 1942; M. M. Kelso, Post War Planning, June 5, 1942, Bur. Agr. Econ. Corres.; Ray Smith to division heads, Sept. 11, 1942, Stat. and Hist. Res. Corres., BAE, RG 83, NA.

103/ F. L. Thomsen. "The Impact of the War on Marketing Farm Products." Journal of Farm Economics. Vol. 25, Feb. 1943, pp. 120-42.

104/ Report of the Milwaukee Conference, July 26-31, 1943, Stat. and Hist. Res. Corres., Bur. Agr. Econ. RG 83, NA.

plans for their areas. Preliminary State reports were sent in to BAE with public works proposals to improve the marketing system. 105/

Then the land-grant college association appointed its postwar planning committee and a subcommittee to meet with a similar group from USDA's Interbureau Coordinating Committee. The two groups met to plan a unified program. When the Interbureau Committee reported to the Secretary on the status of studies, on September 27, 1945, it called for improvements in the marketing system, expansion of exports, and the expansion of research. 106/

The National Association of Marketing Officials was also very interested in the general area, with the theme of "Post War Planning" for its 1944 convention. C. M. White discussed the "Post War Coordination of Federal and State Activities." By the time it met in 1945 research legislation was being considered in Congress and the postwar period had come. 107/

Postwar planning activities had involved a considerable amount of research on the part of USDA and the land-grant colleges at a time when greater emphasis was placed on production and marketing and distribution in an emergency. Members of Congress showed their concern about marketing as bills were sponsored in most sessions to improve marketing procedures for the benefit of farmers and consumers. Then on May 27, 1943, the House of Representatives authorized its Agriculture Committee to make a study of agricultural marketing, but little was accomplished. In 1945, the work was revived, and a detailed study made. According to Joseph Parker, who was involved,

---

105/ Bushrod Allin to Integraters and others. Apr. 15, 1944; Report on Washington Conference on Postwar Planning, Nov. 15-20, 1943; Fred V. Waugh to regional chairmen and regional leaders, Dec. 8, 1943, Stat. and Hist. Res. Corres., RG 83, NA.

106/ Experiment Station Committee on Organization and Policy, Minutes, June 21, 1944; C. R. Wickard to Noble Clark, Apr. 19, 1944; Noble Clark to C. R. Wickard, Apr. 24, 1944; R. C. Smith to Noble Clark, Mar. 3 and 14, 1945; R. C. Smith to W. A. Minor and others, Mar. 16, 1945; Report of Interbureau Coordinating Committee to Secretary, Sept. 27, 1945, Secretary's Corres., RG 16, NA.

107/ Nat. Assn. of State Mktng. Officials. Report. 1944, pp. 19-23; 1945, pp. 5-7.

this provided the background for the Research and Marketing Act of 1946. 108/

108/ Congressional Record. June 21, 1944, pp. 6388-91; 1945, pp. 1449-60; telephone conference, Apr. 8, 1980.

MARKETING RESEARCH COORDINATION, 1946-64

Interest in agricultural research increased substantially during World War II. Not only did the war effort focus more attention on research, the substantial rise in agricultural productivity proved how valuable agricultural research could be. This new appreciation of research was visible on several fronts. In addition to postwar planning by the Department and the land-grant college association, the National Research Council established a separate Agricultural Board in 1944 to consider agricultural questions. Simultaneously, preliminary discussions that would lead to the establishing of the National Science Foundation (NSF) began. Farm organizations also showed an interest in more research, especially the National Cotton Council which made a strong push for a large cotton research program. In Congress, debate began on several proposals that would increase agricultural research in various areas, including cotton, nutrition, and farm buildings. 109/

After the war Congress turned its attention in earnest to agricultural research. Of all the different research fields, marketing was considered the most urgent. Because production had jumped by 30 percent during the war, it was widely anticipated that there would be massive surpluses when demand dropped off, surpluses that would require greater Federal expenditures to keep farm prices from plummeting.

Federal aid for production research had achieved impressive gains. If a similar effort were devoted to marketing research, it was reasoned, marketing costs and consumer prices could be lowered and farm prices raised. In addition, research might uncover new ways of utilizing agricultural products that would absorb some of the increased production and hold down the anticipated surpluses. The utilization laboratories authorized in 1938 and diverted to war-related research could once again turn to the purposes for which they were established. The fear of surpluses became the chief motivation behind marketing research. 110/ By the end of the war sentiment in Congress was nearly unanimous that the Government should initiate a major new research program with marketing at the center.

109/ Knoblauch, Harold C. Research Policy and Procedure Development by the State Agricultural Experiment Stations. Preliminary draft, U.S. Department of Agriculture, Agr. Res. Serv. April 1960, pp. 16-22.

110/ Lewis C. Mainzer. "Science in a Political Context: The Agricultural Research and Marketing Act Program." Ph.D. dissertation. Univ. of Chicago, 1956, p. 6.

Congress approached research along two separate lines. One was an amendment to the Bankhead-Jones Act to broaden the old regional agricultural research program and give more attention to the utilization of agricultural products. With strong support from ESCOP and the Cotton Council, a bill was introduced in the Senate on March 8, 1946, to strengthen utilization. The Senate measure was soon eclipsed by a bill submitted in the House on May 24 by John Flannagan. The Flannagan bill increased research under Title I of the Bankhead-Jones Act and provided for advisory committees and regional coordination of research. Meanwhile, interest in marketing research continued. In 1945, the Republicans had appointed a Food Study Committee and out of the hearings held by that body came a bill introduced on March 28, 1946, by Rep. Clifford Hope for a broad program of Government research on marketing and distribution. In June, the Department, at the request of the House Agriculture Committee, reviewed the Flannagan and Hope bills and combined them as Titles I and II of a measure which became the Research and Marketing Act of 1946. 111/

The most controversial feature of the Flannagan-Hope bill was a section that created an Agricultural Marketing Administration which would unite all Federal agencies dealing with marketing and distribution under one head. This had been a major provision of the Hope bill. Marketing activities, the House Committee on Agriculture reported, "have been shifted about through a long series of departmental reorganizations, and at present...are spread out among various bureaus, agencies, and branches of the Department...(with) numerous other duties in addition to their marketing functions." 112/ Only by consolidating these various branches under one administrator would marketing research be able to receive the same emphasis as production research. The Department, however, vigorously opposed the establishment of a separate marketing administration. In his testimony before the House Committee, Undersecretary Norris E. Dodd argued that production and marketing research belonged together. A separate marketing agency, he said, would interfere with the recent restructuring

---

111/ U.S. Congress. Congressional Record, 1946. pp. 9,148-59, 10,514-15; U.S. Congress, House Committee on Agriculture. Hearings on H.R. 6692. 79th Cong., 2nd Sess., 1946, pp. 140-41; Mainzer. "Science in a Political Context." 1956, pp. 6-12.

112/ U.S. Congress, House Committee on Agriculture. Report to Accompany H. R. 6932. 79th Cong., 2nd Sess., 1946, p. 5; Clifford R. Hope. "A Visualized Program for Marketing," (1951), in Knoblauch, Research Policy. 1960, p. 8.

of the Department (1945) along commodity lines. As drawn up by the Secretary, the combined Flannagan-Hope bill did not require, but merely authorized, the Secretary to reorganize the Department. Nevertheless, the committee still supported a separate administration and, according to Congressman Hope, most members assumed that the Secretary would establish some kind of special organization. 113/

The Research and Marketing Act of 1946 as it finally emerged was a major innovation in the conduct of agricultural research. The Act provided a 5-year program with substantial increases that would raise the total appropriations from $9.5 million in fiscal year 1947 to $61 million in fiscal year 1951. This money was intended for new research, rather than existing programs. Except for contract grants and regional research, each State receiving aid had to put up equal matching funds, meaning that the total program would be at least twice the size of the Federal contribution. For the first time the Secretary was given broad authority to contract research work to other agencies and private industry. Perhaps the Act's most unique feature was the combining of private initiative with government planning. The Department had the final say in choosing projects. But care was taken that those closest to agricultural problems at the local level--farmers, industry groups, agricultural colleges, and experiment stations--had a major input in planning and reviewing research. The Act provided for the first national system of agricultural research advisory committees to meet with Federal officials. At the top was to be a National Advisory Committee composed of 11 members. On the question of a separate marketing organization, the Secretary was empowered "to transfer, group, coordinate, and consolidate the functions, powers, duties, and authorities of each and every agency, division, bureau, service, section or other administrative unit in the Department of Agriculture" that was primarily concerned with marketing and utilization. 114/

The Research and Marketing Act was intended as a bold push forward for agricultural research. But instead of reorganizing the whole research program in line with it, Congress made the act a separate program while continuing regular research. Thus, from the beginning there was confusion in funding. There were really three research funds--RMA, regular research, and special research--and the boundaries between them were unclear.

113/ U.S. Congress, House Committee on Agriculture. Hearings on H.R. 6692, 79th Cong., 2nd Sess., 1946, pp. 140-41, 182-206; Hope. "Visualized Program," 1951, pp. 4-12.

114/ 60 Stat: 1082, Sect. 206.

Furthermore, the complexity of the 1946 Act itself added to the difficulty of administration. It was, as we have noted, two acts that were combined more for convenience than because they represented a unified program. In consequence, the Act contained overlapping sections that duplicated appropriations in other sections. Title II, the Agricultural Marketing Act, was solely on marketing research and service. Title I, however, covered all research, including marketing. Title II (marketing) and Title I, Section 10 (a) (Utilization) dealt with particular subjects. But Title I, Section 9 could be applied to all types of agricultural research, including marketing and utilization. Title I, Section 10 (b) made a special appropriation for cooperative research with the States on subjects other than utilization. Whereas Title II and Section 10 (a) funds could be spent flexibly by the Secretary, Section 9 money, which went to experiment stations, was hedged with restrictions. Twenty percent was to be divided among the States equally, 26 percent by rural population, 26 percent by farm population, and up to 25 percent for cooperative regional research involving two or more experiment stations. Three percent was reserved for USDA research administration. At least 20 percent of the money spent under Section 9 had to go for marketing research. 115/

When the $2.5 million of Title II was added to the $500,000 from Section 9 earmarked for marketing in the first year's appropriation, it was clear that Congress was firmly committed to marketing research. The variety of ways in which the money was apportioned, however, made it difficult to develop a unified marketing program. Marketing projects could be supported by Title II, Title I Section 9 (by Hatch Act apportionment or the regional fund), Section 10 (a) or Section 10 (b).

The Early Years of Research and Marketing Act

After the Research and Marketing Act was signed by the President on August 14, 1946, Secretary Anderson moved to have it implemented. Because of the importance Congress attached to the subject, the Act gave the Secretary unusually direct responsibility for its administration. Although no appropriations were provided for fiscal year 1947, the Secretary went ahead to establish advisory committees and make the necessary internal changes. It was clear from the start that Anderson did not intend to create a separate marketing administration. He reported, in a statement released December 5, 1946, that the advisory committee he had just appointed on the Act "unanimously approved my position that there should not be at this time a final decision as to the desirability of setting up a separate Marketing Administration" until he could confer

115/ 60 Stat: 1081.

with congressional and farm leaders. 116/ Then on December 27, 1946, in Memorandum 1182 he appointed E. A. Meyer, an assistant administrator in the Production and Marketing Administration (PMA), as administrator of the Research and Marketing Act within the Office of the Secretary. Longtime Department employees say that one factor behind the Meyer appointment was his agreement with the Secretary that a separate organization was unnecessary. Anderson's failure to establish a new marketing administration angered many Congressmen but pleased bureau chiefs within the Department, who wished to retain their marketing work. It also pleased experiment station personnel who preferred to continue working solely with their own office. 117/

Meyer became Chairman of the Research and Marketing Advisory Group whose membership, drawn from the heads of various USDA agencies, shows how widely spread interest in marketing research had become within the Department: Agricultural Research Administration, Office of Experiment Stations, Soil Conservation Service, BAE, Forest Service, Production and Marketing Administration, Farm Credit Administration, Office of Foreign Agricultural Relations, ES, and Rural Electrification Administration. Under the Secretary's plan, these agencies would continue to do their marketing work, but now under the coordination of the act's administrator.

Meyer had a staff of five assistants who were given the job of coordinating particular commodity or functional fields. Although RMA's administrator had the authority to approve projects and allocate funds, the older bureaus continued to coordinate research within their fields. Thus, the BAE chief still coordinated economic research and the ARA chief took care of noneconomic research. Authority for overall coordination of the act remained in the Secretary's office. 118/

116/ U.S. Department of Agriculture. Press release 2,638-46, Dec. 5, 1946.

117/ Mainzer. "Science in a Political Context." 1956, pp. 26-31.

118/ BAE lost some of its work on market facilities, transportation methods, packaging, and wholesaling and retailing to PMA but retained its general work in marketing economics, Secretary's Memo. No. 1198, July 11, 1947; No. 1199, July 18, 1947; U.S. Congress, Senate Committee on Appropriations. Hearings...Agricultural Appropriations, 1948. Pp. 97-8; U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1949. Part 1, pp. 306-7; Baker and others. Century of Service, 1963, p. 341.

Following the establishment of the RMA administrator's office, Meyer and the Secretary began to deal with the other new administrative problems created by the act--advisory committees, regional research, and contract work. The Research and Marketing Act provided for an 11-person National Advisory Committee and such other committees as the Secretary thought necessary. Anderson appointed the National Advisory Committee on October 24, 1946, and shortly thereafter met with the committee in the first of its quarterly meetings. Soon renamed the Agricultural Research Policy Committee (ARPC), its duties were "to advise the Secretary of Agriculture...in establishing over-all agricultural policies governing research and the educational and service programs through which research findings are carried to the people." 119/

At its first meeting, ARPC recommended a series of specialized commodity and functional committees to deal with specific areas of research. By 1948, 22 of these committees had been appointed and approved by the Secretary, 19 commodity and 3 functional (cold storage, foreign trade, and transportation). The commodity and functional committees brought interest groups directly into the decisionmaking process. The choice of committees showed the relative strength of different groups. There was, for example, a committee on rice but not on wheat. Each committee, including ARPC, consisted of 11 members drawn from the ranks of farmers and farm organizations, processors, and distributors. ARPC also contained representatives from agricultural colleges and experiment stations. 120/

By law, 6 of the 11 ARPC members had to be farmers or representatives of farm organizations and the same criterion was usually applied to the other committees as well. USDA agencies had a major role in choosing committee members. In appointing the Sugar Advisory Committee, for example, Meyer consulted not only the PMA Sugar Branch but BAE, ARA, ES, the Farm Credit

---

119/ U.S. Department of Agriculture. Report of Activities Under the Research and Marketing Act, 1949. P. 11; U.S. Congress, House Committee on Appropriations. Hearings... Agricultural Appropriations, 1949., Part 1, pp. 519-43.

120/ Harry C. Trelogan. "Administrative Problems and Policies of the Research and Marketing Act of 1946." Journal of Farm Economics. Vol. 31, Feb. 1949, pp. 479-81; Mainzer. "Science in a Political Context." 1956, pp. 42-43.

Administration and the Office of Foreign Agricultural Relations. 121/

Over time, ARPC seats tended to become associated with particular organizations, retiring members being replaced by men from the same groups. On subject area committees, interest groups became entrenched enough to successfully resist most attempts to abolish or consolidate committees. Similarly, when an important organization was left off it provoked controversy. Such a situation occurred in 1949 when the Department omitted the National Livestock Exchange from the meat committee. The SAES's also complained about not being represented on most commodity committees. 122/

The advisory committees provided insights from the agricultural industry on what research was necessary while simultaneously receiving considerable direction from the Department. Before each commodity and functional committee gathered for its annual meeting, the RMA administrator appointed a corresponding working group drawn from the appropriate USDA agencies. The working group compiled a list of problems it thought worthy of research and submitted it to the advisory committee. In Washington, the advisory committee met for 2 to 3 days with Department officials, reviewed the progress of current projects, and made proposals for new projects along with recommendations for expanding or curtailing existing work. Invariably, the committee recommended far more work than could be covered by appropriations--$40-$50 million in projects the first year alone. 123/ For this reason the Department insisted that advisory committees rank their recommendations in order of priority. The administrator, with the aid of the Department advisory group, put together a general plan of work. It was the job of ARPC to review this program and send its recommendations to the Secretary. Certain ARPC members began sitting in on commodity and functional committee meetings in 1949 to aid in coordinating the whole advisory effort.

121/ Mainzer. "Science in a Political Context." 1956, pp. 42-45; E. A. Meyer to Clinton Anderson, Mar. 19, 1947, RG 16 Research Work, NA.

122/ U.S. Department of Agriculture. Report of Activities Under the Research and Marketing Act, 1949. P. 13; ESCOP minutes. May 1951, Nov. 1952.

123/ U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1949. Part 1, pp. 303-5; Senate Appropriations Committee. Hearings...Agricultural Appropriations, 1948. P. 91.

In order to keep committee members informed during the remainder of the year, one of Meyer's assistants served as the executive secretary of each committee, sending out information on current research. By 1950, the committees were being encouraged to make recommendations on the whole USDA research effort rather than just their particular fields. The Department found the advisory committee system a useful way to maintain contact with industry and scientists outside the Federal Government. The advisory committees, in turn, helped to spread knowledge of RMA programs throughout industry and fueled the demand for even more research. Although the Department had the final say in approving all research, the Administrator of RMA could boast in 1948 that 90 percent of the projects approved had been recommended by advisory committees. 124/

The Department also established State-level advisory committees of five members in the late forties to help coordinate Federal and State programs to receive advice from the States. The committees joined a growing number of State commodity and consumer councils that were already providing advice. 125/ A National Advisory Committee of State Departments of Agriculture and Bureaus of Markets was chosen by the Association of Commissioners, Secretaries, and Directors of Agriculture to advise the Department on Title II projects requiring State participation. The committee consisted of State officials who reviewed and made recommendations on the entire RMA program.

The Experiment Stations' Marketing Research Advisory Committee, (ESMRAC) appointed by the regional SAES associations and the land grant college association's Home Economics Division, gave similar advice from the experiment station point of view. This committee, established on the recommendation of ESCOP, early on formed detailed guidelines for the acceptance of projects under Title II. The Extension Marketing Committee advised on the educational side of marketing work, which represented a large increase in the extension budget. Its members were appointed by the land grant college association. Cooperation between these three committees was by no means automatic as State agricultural agencies often saw each other as rivals for Federal funds. For example, during the RMA

124/ U.S. Department of Agriculture. Report of Activities Under the Research and Marketing Act, 1949. pp. 10-13; 1950. p. 8; U.S. Congress. House Committee on Appropriations. Hearings...Agricultural Appropriations, 1949. Part 1, p. 526.

125/ Charles M. Hardin. Freedom in Agricultural Education. Chicago, Ill.: Univ. of Chicago Press, 1955, pp. 102-6.

hearings, the experiment stations clashed with the State commissioners on who was to do marketing research. 126/ Nevertheless, in 1949 the three committees were meeting jointly "to insure coordination of agricultural marketing research, services, and educational work in the States." 127/ The RMA administrator's office, Office of Experiment Stations, and Federal Extension Service, respectively, provided secretarial service for the committees and served as liaisons with the Federal Government in an endeavor to promote closer ties between Federal and State Governments. The Department provided most of the agenda for committee meetings as it did for the commodity and functional advisory committees. For example, in the case of ESMRAC, the Office of Experiment Stations presented for approval an already well considered program with Department recommendations. The Department also had final say on appointments and paid the travel expenses of committee members. 128/

Another innovation of the Research and Marketing Act was the added impetus given to regional research. Experiment stations, before 1946, had cooperated with each other across State lines on various projects and there had been several regional committees. But the 1946 act set up official machinery for such cooperation and required that up to 25 percent of the funds going to experiment stations under Section 9 be for regional work. About 30 percent of this work was in marketing. Unlike the rest of Section 9, regional research funds (9b3) were available as grants without any matching requirements.

126/ U.S. Congress, House Committee on Appropriations. Hearings...Agricultural Appropriations, 1950. Pp. 165-67; U.S. Department of Agriculture. Report of Activities Under the Research and Marketing Act, 1949. P. 13; 1950. pp. 9-11; ESCOP Minutes, May 22-23, 1952; ESMRAC Minutes, 1948-50; Natl. Assn. of Stat. Univ. Proceedings, 1948. Pp. 138-41; Mainzer. "Science in a Political Context." 1956, pp. 14-17.

127/ U.S. Department of Agriculture. Report of Activities Under the Research and Marketing Act, 1949. P. 13; Advisory Committee of State Departments of Agriculture and Bureaus of Markets. "Relationships Among State Agencies Under Title II of the Research and Marketing Act of 1946." Mar. 18, 1949.

128/ ESMRAC. "Procedure to Be Followed in Handling and Approving State Agricultural Experiment Station Projects Financed Under Title II, Research and Marketing Act." Apr. 28, 1949.

RMA also created a Committee of Nine to be selected from the regional associations of experiment station directors to advise the Department on the whole regional program. The committee, following the already existing pattern of four regional SAES organizations, contained two directors from each region and a home economics representatives. As with other advisory committees, the Department (through the Office of Experiment Stations) provided a staff member who acted as committee secretary and liaison between the Federal Government and the States.

At its quarterly meetings, the Committee of Nine put together programs for regional research that were submitted to the Secretary for approval. A counterpart committee within the Department helped plan its work. There were some 55 active projects by 1949, most of them suggested by scientists at particular stations. While still in the planning stage, the directors for the region involved appointed an administrative advisor who, in turn, invited representatives from different subject areas to serve on a technical committee of specialists which developed working plans and carried out the research. Usually, Federal agencies were represented on the technical committees. In most cases, each commodity and functional area had a technical committee in each region. In addition, a large regional technical committee reviewed the whole program and allocated funds. The regional directors established a number of other regional committees for particular commodities or lines of work, such as the Western Agricultural Economics Research Council founded in 1948. Many of these committees appointed coordinators to oversee projects. 129/

RMA's contracting provision was another new feature. Cooperative agreements between USDA and the States had long been part of the Department's work. Under the 1946 contract clause,

---

129/ Geoffrey Shepherd and Alan Goldman. "Methods and Procedures in Planning Regional Marketing Research," Journal of Farm Economics. Vol. 34, Dec. 1952, pp. 884, 888-91; ESCOP. Minutes, Dec. 1946, Feb. 1947; U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1950. Part 1, pp. 194-95, 1953. Part 1, p. 351; E. C. Elting, "Problems of Planning Regional Research Under the Research and Marketing Act," Speech given Apr. 14, 1949, pp. 3-6, in Knoblauch, Research Policy, 1960; Mainzer, "Science in a Political Context." 1956, pp. 37-39; Committee of Nine Minutes, Feb. 4 and May 26-28, 1947; Digest of Minutes, Dec. 16-17, 1946 to Nov. 9-13, 1951; F. D. Fromme to SAES directors and regional administrators, Dec. 5, 1947, filed with Committee of Nine minutes.

the Secretary for the first time was allowed to make contracts with private and Government organizations where USDA facilities were inadequate. This procedure not only saved the Government money where work could be done cheaper by contract, it also aided coordination because contracts avoided some of the bureaucracy of in-house research. Despite some resistance from within the Department to contracts, Congress quickly made it clear that it favored maximum use of contracting power. In 1948, the Department let $827,095 in contracts under Section 10 (a) and Title II of which $292,345 went for work in marketing. By 1951, when appropriation bills began requiring minimum amounts for contracts, $650,000 of Title II alone was to be contracted. Most of the contracts were with industry, private laboratories, and universities, with the latter becoming increasingly important by the early fifties. 130/ The use of contracts was a way of recognizing how much agricultural research was done outside the USDA-SAES system. About half the agricultural research in this period was conducted by industry, much of it not available publicly and not well coordinated with Government research. Contracts allowed USDA to tap the resources of laboratories that would otherwise be outside the scope of its activities. Subsequently, other Federal agencies such as the National Institutes of Health, Food and Drug Administration, and NSF also conducted or supported agricultural research.

From its early years, the RMA-financed marketing research program experienced administrative problems. For one thing, because research was conducted by several different bureaus, planning was never centralized the way Congress hoped. According to Harry C. Trelogan of ARA there was "no clearly defined underlying philosophy as to what should be done other than what is in the Act itself." And, as Trelogan pointed out, "it is evident that the act means different things to different people." 131/ Meyer's office was more concerned with coordinating than planning. At no time was a long-range research plan made. The closest thing to it, a 1952 report by B. T. Shaw and his ARA staff on research needs up to 1960, placed the emphasis on production research. ARPC worked without success for an integrated program. Thus, research plans tended to come from a variety of sources and were never fitted into a comprehensive marketing research strategy. Those areas

---

130/ Mainzer "Science in a Political Context." 1956, pp. 48-49, 85-88, 135; U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1950. Part 1, pp. 179-82.

131/ Harry C. Trelogan. "Federal Projects Submitted Under the Research and Marketing Act of 1946," Journal of Farm Economics. Vol. 29, Nov. 1947, Part 2, p. 1,384.

backed by strong pressure groups, such as cotton and fruits and vegetables, had the strongest research programs. 132/

Perhaps because the Department never treated RMA as a truly unified program, Congress refused to fund the act at anywhere near the levels promised for the first 5 years. During fiscal year 1947, which was to have been the first year of the program, Congress provided no money at all. For fiscal year 1948, Meyer requested the full second-year appropriation of $19 million on the grounds that the advisory committees had already worked out a detailed plan of research. The House Appropriations Committee, however, reduced the appropriation to the first year's proposed level of $9 million. In the second year, instead of $19 million, Congress allowed only $13.85 million and in the third year only $19 million instead of $33.5 million. 133/ Expansion of the program was temporarily halted during the Korean War, because surpluses no longer seemed a major problem. The RMA did greatly increase the amount of money spent on marketing research--from $1.16 million, or 4.7 percent of the total research budget, in 1946 to $5.59 million or 12.4 percent, in 1951. Nevertheless, the marketing program never became the equal of production research as the sponsors RMA had hoped. 134/

Despite the slow beginning of the RMA program, it was a substantial enough boost in money to put a strain on the research system. One immediate problem was finding enough scientists qualified to do marketing work. Early critics of the act charged that marketing researchers were inadequately trained, tended to confine their work to farms rather than later points in the marketing process, and concentrated on descriptive research to the neglect of theoretical problems. USDA, to help train marketing researchers, began sponsoring

---

132/ Mainzer. "Science in a Political Context." 1956, pp. 55-62, 71-78, 113-18.

133/ U.S. Congress, Senate Appropriations Committee. Hearings...Agricultural Appropriations, 1948, Pp. 81-90; U.S. Congress, Department of Agriculture Appropriations, 1948, 1949, 1950.

134/ U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1949. Part 1, p. 304, 1950. Pp. 1,217-18; Harry C. Trelogan. "Marketing Research in the United States During the Past Five Years," Journal of Farm Economics. Vol. 33, Nov. 1951, p. 933; Mainzer. "Science in a Political Context." 1956, pp. 146-53.

marketing workshops in 1949. 135/ Coordination was especially difficult for marketing research because it involved so many different disciplines. For example, in regional research, many of the regional commodity committees were comprised entirely of agricultural economists. It was not easy to get scientists used to following their own lines of work to cooperate with others outside the field. 136/ Furthermore, there was no satisfactory way to coordinate between regions, a common situation in marketing research. One commentator characterized RMA's first years as a period with "a number of false starts and a good deal of waste motion." 137/

Another problem that developed early in the program was the difficulty in arranging criteria for which projects would be funded by RMA. RMA gave no clear definition of marketing. Congress insisted that research under the law be new rather than just a continuation of old research so that marketing would receive the impetus intended. The Bureau of the Budget, however, tried to put as much old research as possible under the act. USDA guidelines officially followed congressional wishes. For example, the criteria for Title II projects at experiment stations drawn up by ESMRAC in 1949 required that projects must be new work not previously investigated by the stations and that Federal funds for them should come exclusively from Title II rather than a combination of Title II funds with money appropriated by earlier acts. 138/ Nevertheless, because RMA work was not really new, but rather an expansion of older work, differentiating between the two became almost impossible. Much old work was funded by RMA. Moreover, some nonmarketing work was given a marketing cast so it would qualify under RMA. This led the House Agricultural Appropriations Subcommittee to charge that the Department was building up its old bureaus by using the act to obtain funds which could not be gotten under regular appropriations. 139/

135/ Trelogan. "Marketing Research." 1951, pp. 940-42.

136/ Shepherd and Goldman. "Methods and Procedures." 1952, pp. 892-93; Elting. "Problems of Planning Regional Research." 1949, p. 7.

137/ Herman M. Southworth. "What Has Regional Research Contributed to Marketing?" Journal of Farm Economics. Vol. 34, Dec. 1942, p. 882.

138/ ESMRAC Minutes. Jan. 1949.

139/ U.S. Congress. Federal Agricultural Research. Serial ZZ, 1950, pp. 49-52; U.S. Congress, House Appropriations Cmte. Hearings...Agricultural Appropriations, 1951. Part 1, pp. 149-52.

Further confusion resulted because the lines between Title II and other parts of the 1946 Act were not clear. Allocation by title and section was a matter that took some time for the Department to work out. 140/ In 1949, Meyer admitted to a meeting of ESMRAC that he had "not found it very easy to determine whether some /projects/ were qualified for Title II support" because of the "apparent overlapping of purpose between...10 (a) and Title II." 141/ Similarly, Harry C. Trelogan of the administrator's office stated that "the nature and extent of State Agricultural Experiment Station participation in the Title II program remains an outstanding unsolved problem." 142/

The administrator's office, in an effort to keep track of all RMA projects, began a central project file in 1948 containing a numbered list and description of all Federal and State projects funded by RMA. This supplemented an already existing one in ARA that covered all research projects (including economic) and one in the Office of Experiment Stations that listed all SAES projects. For State-funded projects, though, the Department had to rely on voluntary reports. Only about 30 stations sent in regular progress reports on State projects. 143/

Complicating RMA's early years were disagreements between State and Federal officials. The Department wanted to see RMA used for work of national, or at least regional, interest. ESMRAC, however, strongly supported local research under the act. The experiment stations hoped that Title II would be distributed on a formula basis to make appropriations more predictable, but the Department decided against using a formula. When regional money was divided among the States, it tended to be spread so thinly that no one experiment station had more than a small part of the work. This satisfied experiment station directors, who wanted funds from as many sources as possible. But it made it more difficult to coordinate research and often meant that existing facilities were not

---

140/ U.S. Congress, House Committee on Agriculture. Federal Agricultural Research. 1950, p. 52; Mainzer. "Science in a Political Context." 1956, pp. 94-100.

141/ ESMRAC Minutes. May 1949.

142/ Trelogan. "Administrative Problems." 1949, p. 484.

143/ U.S. Department of Agriculture, Agricultural Research Administration. Organization of Agricultural Research in the United States. July 1950, pp. 4-5; Mainzer. "Science in a Political Context." 1956, pp. 33-37.

adequately used. Similarly, the States were suspicious of the role of Federal employees in State work. Many regional coordinators were employed jointly by the regional committee and BAE and some remained coordinators even after going to Washington for full-time BAE work. The Federal Government, for its part, found it difficult to get the information it needed to support appropriations for experiment stations. 144/ There was also some difficulty about the place of economic research in the research and marketing program. RMA gave a boost to economic research but that work was still coordinated separately from scientific work. Some experiment station people complained that the two types of research were not well integrated. The Department also showed a tendency to shy away from controversial economic research such as costs and margins work. 145/ In general, members of advisory committees showed little interest in economic research because it did not seem to offer solutions to their immediate production problems. However, this gave BAE researchers considerable influence in choosing projects and conducting research.

In the late forties, the Department began a reorganization of research work which left the administration of RMA even more confused than before. Secretary Anderson placed the coordination of all research, except economic and RMA, into the hands of the agricultural research administrator in 1947. Secretary Brannan accepted the resignation of E. A. Meyer as RMA administrator and transferred supervision of the act to the ARA administrator, P. V. Cardon in 1949. 146/ Thus, coordination of marketing research was given to the agency that handled 82 percent of all USDA research (and most RMA work) but only a relatively small part of marketing research. Nearly half the marketing research for fiscal year 1951, for example, was done by PMA and another large share was performed

144/ ESMRAC Minutes. Nov. 1950, May 1951; Elting. "Problems of Planning Regional Research." 1949, p. 8; Mainzer. "Science in a Political Context." 1956, pp. 83-84; Shepherd and Goldman. "Methods and Procedures." 1952, pp. 891-92; R. W. Trullinger to R. E. Buchanan, November 25, 1946, in Knoblauch, Research Policy, 1960, Attachment T.

145/ ESMRAC Minutes. Nov. 1950; Mainzer. "Science in a Political Context." 1956, pp. 132-33.

146/ Secretary's Memo., No. 1187, Mar. 19, 1947; No. 1197, July 1, 1947; No. 1237, July 29, 1949.

by BAE. 147/ The remaining funds were distributed to various agencies including the Office of Experiment Stations in ARA. The reorganization of 1949 was still far from the unified administration contemplated by the act. Advising the ARA administrator was the same mix of advisory committees established by Meyer. The Research and Marketing Advisory Committee continued, under the title of Research Council, to give other agency heads access to the administrator, at twice monthly meetings. In addition, the administrator also received the advice of newly created in-house research panels (1948) which gave technical consideration to programs in particular fields. At the center of ARA's internal coordination was the assistant administrator for program development and coordination who had under him administrators for production and utilization, and marketing. These two men worked with a group of coordinators for specific areas--field crops, horticultural crops, human nutrition and home economics, livestock, natural resources, and extension. Finally, the assistant administrator for program development had charge of an office for program analysis and project inventory which maintained the central project file. The Office of Experiment Stations remained in ARA under a different assistant administrator.

Despite this considerable apparatus, final authority for coordinating marketing activities remained in the Secretary's Office where Meyer had performed that function during his 2 years as RMA Administrator. 148/ The new organization did not please Congress. Because Meyer had been an enthusiastic proponent of marketing research, it was feared that placing the administration of the act under the production research-oriented ARA would diminish its value. In 1950, a congressional investigation, the so-called Doane Report, once again recommended a single administration as the most efficient means of organizing research. When Secretary Brannan designated an

---

147/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1951. p. 142, 1950. p. 154; B. T. Shaw to Charles F. Brannan, Jan. 24, 1951, files of the Agr. History Branch, Econ. Res. Serv.

148/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1951. Part 1, pp. 143-46; U.S. Department of Agriculture, Office of the Secretary, Memo. to heads of USDA agencies, Aug. 10, 1949; Minutes of bureau chiefs meeting, Oct. 5, 1948, files of the Agr. History Branch, Econ. Res. Serv.

assistant secretary to coordinate all research in 1951, he left RMA work under the direction of the ARA administrator. 149/

Centralizing Marketing Research Administration: Coordination in the Fifties

In 1953, the new Secretary of Agriculture, Ezra Taft Benson, made a far-reaching reorganization of the Department which came the closest to placing marketing research in one agency than any organizational setup since the 1946 act. Spurred in part by the Hoover Commission Report of 1949, which characterized the Department as "a loose confederation of independent bureaus and agencies," Benson abolished the old bureaus and established a smaller number of agencies to allow more of a team approach to major issues and clearer lines of authority. 150/ One of the biggest changes involved economic research. The BAE, which had conducted nearly all the Department's economic research since 1922, was divided between two new organizations, the Agricultural Marketing Service (AMS) and Agricultural Research Service (ARS). This provoked an immediate attack from economists who thought the reorganization threatened long-range economic research, which had already suffered in recent years despite RMA. 151/ The new ARS was basically a continuation of ARA but the old scientific bureau chiefs of ARA disappeared in name and were replaced by deputy administrators. This worried the SAES directors who feared that experiment station work was being demoted and that it would be harder to obtain money from Congress. 152/

The AMS however, pleased supporters of a single marketing administration because it was in line with the intent of the 1946 act. AMS combined the marketing functions of PMA with marketing economic research from BAE and the marketing parts of ARA. Within AMS, the Marketing Research Division and the Agricultural Economics Division both reported to the

---

149/ U.S. Congress. Federal Agricultural Research, 1950; Secretary's Memo., No. 1279, Feb. 15, 1951; Mainzer. "Science in a Political Context." 1956, pp. 31-32.

150/ Ernest G. Moore. The Agricultural Research Service. New York: Frederick A. Praeger, 1967, pp. 78-79; Baker and others. Century of Service, 1963, pp. 374-75.

151/ O. V. Wells and others. "The Fragmentation of the BAE," Journal of Farm Economics. Vol. 36, Feb. 1954, pp. 1-21; Baker and Rasmussen. "Economic Research." 1975, pp. 64-65; Hardin. Freedom in Agricultural Education. 1955, pp. 155-58.

152/ Moore. Agricultural Research Service. 1967, pp. 161-62; Baker and others. Century of Service. 1963, p. 466.

deputy administrator for marketing research and statistics, the closest that economic and noneconomic research had been grouped since RMA was established. Within the Marketing Research Division itself was that part of BAE that had dealt with the structure and organization of markets. 153/ During a reorganization in 1960, marketing research and statistics were separated and the Agricultural Economics Division was placed under the latter. The new deputy administrator for marketing research, however, had under him a Marketing Economics Research Division that contained nearly all the economic functions relating to marketing research. Other aspects of marketing research also became separate divisions--Marketing Research Development, Market Quality Research, and Transportation and Facilities Research. The deputy administrator likewise served "as the focal point in AMS on Research and Marketing Act Advisory Committee activities." 154/ Elsewhere in AMS was the liaison office which reviewed matching fund projects proposed by the States and coordinated such work between States.

The 1953 reorganization left the overall coordination of research in ARS--as it had previously been. ARS directly administered both Title I and Title III of RMA--the experiment station funds and the advisory committee structure--although appointments to advisory committees still had to be cleared with the Secretary. Much of this work involved marketing research, which had to be checked against the work being done by AMS. Responsibility for coordinating all research, as well as the advisory committees, was given to the ARS's deputy administrator for research. The Central Project Office continued its inventory of all projects and reported directly to the administrator. 155/

Despite the consolidation of most marketing research within AMS, it was clear by the midfifties that the Research and Marketing Act as a separate program was on the wane. The abolition of the RMA administrator's office and the continuing failure to use the program as a unified research effort led Congressmen and administrators alike to think increasingly of RMA as simply another part of the Department's research work.

153/ Baker and others, Century of Service. 1963, pp. 377, 464; Secretary's Memo., No. 1320, Supp. 4, Nov. 2, 1953.

154/ U.S. Department of Agriculture. Agricultural Marketing Serv. Instructions 100-1, Nov. 6, 1953, Rev. 1, Apr. 29, 1955, Rev. 2, Jan. 21, 1960.

155/ U.S. Department of Agriculture. Agr. Res. Serv. Admin. Memo. No. 101.1, Dec. 28, 1953.

After 1950, even the advisory committees established especially to oversee the program were dealing with the entire agricultural research program.

In 1950, Congress began to dismantle the RMA by removing Sections 10 (a) and (b) and putting them in with regular funds. Simultaneously, congressional hearings stopped giving RMA appropriations separate treatment. An amendment to the Hatch Act in 1955 dropped Title II altogether and Congress thereafter took up appropriations by agency, such as ARS or AMS. 156/ These changes eliminated much of the confusion created by overlapping RMA and regular appropriations but it was no longer possible to talk about RMA as a distinct entity.

Marketing research prospered under AMS in spite of the demise of RMA. The Department found it easier to obtain appropriations when research was part of an action agency, especially under AMS administrator O. V. Wells who had particular success in his relations with Congress. The Senate Appropriations Committee tended to be more generous than the House, but on the whole, both houses favored more money for agricultural research. After dipping to $3.7 million for Title II (AMS work) during fiscal year 1953, appropriations rose to $6.9 million in fiscal year 1958. Of this, the amount devoted to economic and statistical research increased in the same proportion, to $1.5 million by 1958. Congress continued to insist on a detailed breakdown of appropriation proposals so it could exercise maximum control. Increasingly, funds were earmarked for special purposes, although beginning in 1952, ARA was allowed to transfer up to 7 percent of its funds to other projects in order to insure some flexibility. 157/

The advisory committees in the fifties continued their important role in reviewing research progress and plans. As time passed, their place in the coordination of research became better defined. At first they were seen as an

---

156/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1952. Part 1, p. 197, 1955. Part 2, p. 337; Department of Agriculture Appropriations, 1950, 1951; 69 Stat: 671; ESMRAC Minutes. Nov. 1956; Mainzer. "Science in a Political Context." 1956, pp. 76-78.

157/ Baker and Rasmussen. "Economic Research." 1975, p. 65; U.S. Congress, House Appropriations Committee. Hearings... Agricultural Appropriations, 1955. Part 3, p. 966; 1959, Part 2, p. 1,276; Mainzer. "Science in a Political Context." 1956, pp. 89-94.

important source of new proposals, but gradually scientists themselves took over this function. This was in accordance with the beliefs of ARA administrator P. V. Cardon who felt that research workers could better anticipate problems than businessmen and farmers. 158/ The early committees also tried to get involved with research administration, an expansion of authority which the Department resisted. In the first decade or so of RMA, industry trade associations had a strong influence on research projects through advisory committees because marketing researchers needed to work closely with trade groups. The sometimes intimate relationships between researchers and industry frequently gave the former a stronger hand than administrators in determining projects. 159/ Nevertheless, advisory committees had a positive influence in pulling together the research program both because they were drawn from a variety of sources and because, however narrow their specialties, they had to review the work of several different Department agencies. ARPC in addition showed an interest in looking at national policy questions affecting research. 160/

Over the years what Harry C. Trelogan has called "a spirit of mutual confidence and respect" developed between scientists and members of the committees in spite of the scientists' initial resentment at having to report to groups of nonprofessionals. Advisory committees had more time than legislative committees to consider research proposals and often listened with more sympathy than Congress. Congress itself, though, felt that the advisory committees were not taking a strong enough position in evaluating projects. Congressman Whitten believed that the committees did not meet long enough to weed out duplicate and unproductive work. In 1957, Whitten's subcommittee asked that advisory committees "review their basic

---

158/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1952. Part 2, pp. 192-94.

159/ Martin Kriesberg. "Trade Group Relations and the Conduct of Agricultural Marketing Research," Public Administration Review. Vol. 15, Autumn 1955, pp. 278-80.

160/ Robert B. Taylor. "Marketing Research as Viewed by a Farmer," Agricultural Marketing Research: Its Use, Appraisal, and Prospect, A Report of the National Workshop on Agricultural Marketing, July 13-20, 1956. AMS-60, 1956, pp. 43-44; Harry C. Trelogan. "Research and Marketing Advisory Committees," Journal of Farm Economics. Vol. 38, Feb. 1956, pp. 1-7.

purpose and consider how to undertake new and important research projects without continually requesting additional appropriations." 161/

Despite the reorganization of the Department and the importance of advisory committees, coordination of research remained a problem in the fifties. Regional research was an area of particular difficulty. Regional projects expanded rapidly throughout the fifties, from 70 active projects in 1950 to 198 in 1958. The program was popular enough to attract two-and-a-half times the amount of Federal investment from State sources. Under the law, the Committee of Nine had great discretion in allocating money. But to stop the scramble for funds that occurred early in the program, the committee in 1953 adopted a strict formula distribution between regions. Within regions the same thing often happened. Because each State desired to participate in a maximum number of projects, it was common for the money to be spread too widely. Projects involving more than one region were not well handled. In 1949, the Committee of Nine declined to establish any set procedures for interregional projects. Proposals for such work had to have unanimous approval from the regional directors associations. Finally, in 1953, the Committee of Nine put aside a small fund for interregional research and over the next few years interest in it grew. 162/

The administrative apparatus for regional research in the fifties had, according to Harold C. Knoblauch of the experiment station office, developed into "some rather cumbersome machinery." 163/ ESCOP chairman A. A. Spielman, speaking in 1958, criticized "the complex administrative pattern...which fair promises to strangle us with our own red tape." 164/ A good part of the problem lay with the

---

161/ U.S. Congress, House Appropriations Committee. Report to Accompany H.R. 7441, 1957, p. 12.

162/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1961. Part 1, p. 476, 1958. Part 2, pp. 600-01; Mainzer. "Science in a Political Context." 1956, pp. 79-81; Committee of Nine Minutes.June 20-21, 1949, June 23-28, 1954; Digest of Minutes. Dec. 16-17, 1946 to Nov. 9-13, 1951.

163/ U.S. Congress, House Appropriations. Hearings... Agricultural Appropriations, 1963. Part 2, p. 704; Hardin. Freedom in Agricultural Education. 1955, p. 24.

164/ Nat. Assn. of State Univ. Proceedings. 1958, p. 163.

regional technical committees which not only developed research programs but recommended the allocation of funds for them among experiment stations. The membership on these committees was sometimes so large, diverse, and geographically separated that much of the work was turned over to smaller subcommittees, whose decisions were often "neither understood nor genuinely accepted by the larger committee memberships." 165/ As for the smaller, single-project technical committees, their reluctance to terminate work showed an instinct for self-preservation that disturbed critics. Moreover, responsibility was too divided. Thus, it was difficult for these committees to enforce their guidelines on researchers who gave their first loyalties to the universities that employed them. Committee chairmen had little authority. In those committees that employed coordinators, friction often developed between the coordinator and State researchers who felt their role was being undercut. 166/

The Committee of Nine set up a project review subcommittee in 1956 to sift through projects more thoroughly before the full committee met. It also increased the term of service on the committee from 2 to 3 years to provide more continuity. These reforms did little good, though, and in 1958 Spielman recommended a cutback in regional research and a simplified organization. 167/ For economic research at least, the western region had a form of regional organization that seemed to work. There overall resource allocation was separated from the regional technical committee in 1948 and given to a committee of department heads, the Western Agricultural Research Council, which advised western experiment station directors. This body was able to bring the pressure

---

165/ Wilbur R. Maki. "Regional Research Planning and Coordination in Agricultural Marketing," Journal of Farm Economics. Vol. 45, Nov. 1963, p. 760.

166/ William E. Folz. "Regional Research--A Critical View," Proceedings of the Western Farm Economics Association, 1955. Pp. 140-43; Mainzer. "Science in a Political Context." 1956, pp. 39-41; Natl. Assn. of State Univ. Proceedings. 1958, pp. 161-63.

167/ Natl. Assn. of State Univ. Proceedings. 1956, p. 137, 1958, pp. 161-63.

needed to close out old projects and limit the number of participants to make research more efficient. 168/

Another area where coordination remained a problem was between the Federal and State Governments. During the fifties, the States had a number of complaints about the way Federal programs were administered. The States had to plan their work a year in advance without knowing what the Federal appropriation for the coming year would be. Departmental committees which reviewed research had much more familiarity with Federal work than State work, which made it harder to tie the two programs together. The small number of SAES people on USDA advisory committees, the stations felt, created a bias in favor of Federal work. ESCOP and the Federal Government fought over expanding physical facilities. A survey made of the States in 1955 projected a need for $240 million in new laboratory buildings and equipment over the next decade. A Physical Facilities Bill was introduced in several Congresses but the Department did its best to defeat the measure until it finally passed in 1963. 169/ There were also complaints that most experiment station funds were going to a few well-equipped stations, leaving others without the money necessary to improve their work. In the case of Section 204b programs, only 32 stations were participating in 1960. One station received 20 percent of the total money. In addition, States accused ARS of raiding State personnel by offering salaries higher than the States could afford to pay. 170/

168/ Maki. "Regional Research Planning." 1963, pp. 765-66. For later criticism attacking provincialism and weak organization in regional research see Marshall Harris and R. J. Hildreth, "Reflections on the Organization of Regional Research Activities," American Journal of Agricultural Economics. Vol. 50, Nov. 1968, pp. 815-26.

169/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1957, Part 2, pp. 549-50; Senate Appropriations Committee. Hearings...Agricultural Appropriations, 1958. Pp. 113-15; Agricultural Marketing Research...National Workshop...1956. P. 191; Natl. Assn. of State Univ. Proceedings. 1958, pp. 160-61, 1959, p. 121; U.S. Department of Agriculture. Food and Agriculture: A Program of Research. Jan. 1962, Part 1, p. 23. 77 Stat: 90.

170/ ESMRAC Minutes, Apr. 21-22, 1960; Natl. Assn. of State Univ. Proceedings. 1957, p. 157; U.S. Congress, Senate Appropriations Committee. Hearings...Agricultural Appropriations, 1958. Pp. 115-16.

At least some of the differences between Federal and State Governments, however, were smoothed over by ESCOP and its subcommittees. ESCOP's Federal-State Relations Committee, for example, helped resolve disagreements and worked out jurisdictional disputes. ESMRAC, in 1951, was instrumental in having the Department create a Federal counterpart committee to review work proposed by Federal agencies and meet jointly with ESMRAC so that the experiment stations could learn more about Federal research plans. ESMRAC also compiled a handbook for the experiment stations clarifying the guidelines for submitting projects. ESMRAC supported a strong Federal role in coordinating marketing agencies within the States and urged State administrators to show more willingness to cooperate with each other. In 1954, on the recommendation of the State marketing, extension, and experiment station committees, the Relationships Among State Marketing Agencies Committee superseded the counterpart committee. 171/

Because Federal efforts to coordinate research were not completely effective, an attempt at coordination from the private sector came to fruition in 1951. Industry scientists working with the Agricultural Board of the National Research Council wanted an organization that would support the board and promote agricultural research. The Agricultural Board, founded in 1944 to pool the minds of agricultural scientists and evaluate research, had at first been composed of experiment station directors but, after passage of RMA, they turned their attention elsewhere.

In 1951 the National Research Council established the Agricultural Research Institute to be composed of Federal, State, industry, and scientific society representatives in order to bring together their thinking on a broader scale than possible anywhere else in the agricultural research system. The institute, being independent of Government control, could express its views without political constraints. By 1955 it had well over 100 member organizations from industry, science, and Government. Although little of the institute's work in the fifties involved marketing, it did serve as a forum for a broad spectrum of ideas on agricultural research. Its coordination was handled through committees and scientific societies. Also, to promote basic research, Congress established the National Science Foundation in 1950 to provide support for scientific work through grants and contracts. Although its work in agriculture was much less than the

171/ ESCOP Minutes. Nov. 12, 1961; ESMRAC Minutes. May, Sept., 1951, May 1954; Minutes of joint meetings between ESMRAC and the State marketing and extension agencies. Feb. 1954, Oct. 1959, Oct. 1961.

Agricultural Research Institute's, it, too, helped coordinate scientific resources in the broadest sense. 172/

Decentralizing Administration: The 1961 Reorganization

The Department underwent another major reorganization in 1961, this time in the direction of grouping work by discipline. In the process, marketing research was once again divided. The new Secretary, Orville Freeman, wanted to reestablish economic research in a separate organization. The Economic Research Service (ERS), created April 3, 1961, brought together economic work in AMS, ARS, and FAS. For marketing, this meant that the AMS divisions of Marketing Economics Research, Agricultural Economics, and most of Marketing Development Research, and the economic research functions of the Transportation and Facilities Research Division were separated from other marketing work and placed in ERS. ERS reported to a director of agricultural economics, whereas the rest of AMS marketing was under the assistant secretary for marketing and foreign agriculture. 173/ It was during the reorganization that the State experiment station directors succeeded in getting the State Experiment Stations Division transferred out of ARS and made into the Cooperative State Experiment Station Service (CSESS) under the assistant secretary of Federal-State relations. Thus, marketing research reported to three separate men in the Secretary's Office. CSESS administered the payments to States under the 1946 act and reviewed and coordinated Federal and State research in cooperation with the ARS administrator. 174/

In 1963, to make coordination under the new organization more effective, a director of science and education was created whose responsibility was to coordinate all research activity in the Department. ARS, ES, and the Cooperative State Research Service (formerly CSESS) all reported to him. Nyle C. Brady, the first director, coordinated through a staff group drawn from the agencies doing research, which met twice a month. 175/ At first Brady left the Central Project Office, the Agricultural Research Council, and the advisory committees under ARS deputy administrator E. C. Elting. But in 1964, Brady placed Elting's organization under his own immediate

---

172/ Agricultural Research Institute. Proceedings. 1952, pp. 1-3, 1953, pp. 5-6, 1954, pp. 6-8, 1955, pp. 5-7.

173/ Secretary's Memo., No. 1446, supp. 1, Apr. 3, 1961.

174/ Secretary's Memo., No. 1462, supp. 1, Aug. 30, 1961, supp. 2, Apr. 4, 1962.

175/ Secretary's Memo., No. 1548, Dec. 11, 1963.

authority, a move which gave the director much greater control over coordination. 176/ ERS and AMS continued to report elsewhere, although AMS research was still reviewed by the ARS administrator.

This new organization was an awkward arrangement for marketing research. Not only was coordination difficult, the relationship between marketing and some other types of research was so close that it was hard to draw the lines between them. This was especially true for market quality research where the condition of agricultural produce was related to crop improvement work done by ARS. It was necessary for entomologists to work in both ARS and AMS. In 1964, over the protest of several Senators who felt that marketing research could not be separated from other regulatory and service work, Secretary Freeman took the Market Quality and Transporation and Facilities Divisions out of AMS and put them in ARS. 177/

The advisory committee system underwent substantial change in the sixties which resulted in a lesser role for the industry and producer committees established under the 1946 Act. The House Appropriations Committee continued to express disappointment over the failure of advisory committees to end unfruitful work. 178/ In 1963, Secretary Freeman restructured the commodity committees, reducing them from 25 to 11 and providing for public sessions so that organizations not represented on the committees could present their views. One of the new committees handled marketing research and service. Freeman expressed the hope that "the new Committee organization will permit a more systematic and precise review of the programs of the research agencies." 179/ At first, membership on the new committees remained the same as before but in 1964 the Secretary put the committees under greater Federal control by appointing Department officials to be chairmen and vice-chairmen of each. The National Agricultural Research Advisory Committee (NARAC formerly ARPC) was continued. Its new chairman, director of

---

176/ N. C. Brady. Memo. to Secretary's staff and agency heads, Coordination of Research, Apr. 14, 1964.

177/ U.S. Congress, Senate Appropriations Committee. Hearings ...Agricultural Appropriations, 1965. Pp. 80-83; Secretary's Memo., No. 1554, May 4, 1964, supp. 1, June 19, 1964.

178/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1962. Part 1, pp. 256-57.

179/ Secretary's Memo., No. 1544, Aug. 26, 1963.

science and education Nyle C. Brady, was the chairman of nearly every other committee as well. In the case of the marketing advisory committee, the vice-chairman was the deputy administrator of AMS (a position that went to ARS after marketing research was transferred in 1964). This reorganization brought greater unity to the advisory committee system but presumably lessened the voice of farmers and industry.

The declining importance of the old advisory committees is reflected in a 1967 memorandum which notes that committees were expected to meet at least every 2 years; previously, annual meetings had been the rule. In 1969, the committees, except for NARAC, were dropped altogether and replaced by a series of regional workshops. ESMRAC also underwent a decline. After Section 204b funds (which had been the focus of ESMRAC's advice) were discontinued as a separate entity in 1964, ESMRAC lost its major role and became a subcommittee of ESCOP. Following this, it suffered from a rapid turnover in membership and devoted its efforts mainly to broadening the definition of marketing. 180/

The Department did make one more effort to obtain advice from nongovernment sources when it appointed a group of university scientists to a Committee on Agricultural Science in 1962. By 1969, though, a task force decided the committee was superfluous and recommended its abolition. In 1972, the Federal Advisory Committee Act gave the Office of Management and Budget the power to set guidelines for advisory committees and limited their life to 2 years subject to renewal. 181/

During the sixties the Department came to rely more on advice from committees drawn from within the Government itself. In 1964, the Secretary created the Agricultural Research Planning Committee with primarily Federal and land-grant members to plan and coordinate long-range agricultural research and promote

---

180/ Ibid. supp. 1, Feb. 28, 1964; supp. 1, revised, Sept. 6, 1967; supp. 3, July 13, 1967; ESMRAC Minutes. June 1964, May 1965, Jan. 1967, Oct. 1969.

181/ Secretary's Memo., No. 1498, Apr. 16, 1962; U.S. Congress, Senate Appropriations Committee. Hearings...Agricultural Appropriations, 1970. Part 1, p. 70; 86 Stat: 770; Secretary's Memo., No. 1783, revised Feb. 5, 1974, Feb. 4, 1975; No. 1754, supp. 1, Sept. 18, 1973; 1806, Mar. 2, 1973; 91 Stat: 1041.

cooperation between the Federal and State Governments. 182/ More important, though, was the establishment of the Agricultural Research Policy Advisory Committee (ARPAC) in 1969 at the recommendation of a task force of Federal and land-grant officials. ARPAC had the same objectives as the planning committee but its membership was broadened to include non-voting representatives from NARAC, Bureau of the Budget, and Agricultural Research Institute. Thus, advice on overall coordination was to come from administrators and scientists rather than from representatives of producers and industry as was the case before 1964. To concentrate the resources of this rather large committee, much of ARPAC's work was done through subcommittees and adhoc groups. By 1973, ARPAC had so taken over the functions of NARAC that Congress abolished the latter group. 183/

182/ Secretary's Memo., No. 1561, July 24, 1961. There was also a representative from the National Academy of Sciences and one from the Office of Science and Technology.

183/ Secretary's Memo., No. 1657, June 16, 1969; U.S. Congress, Senate Appropriations Committee. Hearings...Agricultural Appropriations, 1970. Part 1, pp. 69-70; U.S. Comptroller General. Report to the Joint Economic Committee: Management of Agricultural Research: Need and Opportunities for Improvement. Genl. Acct. Off. 1977.

REASSESSING RESEARCH: THE LONG-RANGE STUDY AND AFTER

By the early sixties, agencies throughout the Government were showing increased interest in coordinating and exchanging scientific information. Along with it came a desire to put newly developed computers to work organizing information. The Federal Council for Science and Technology was established in 1959 to help coordinate scientific work in Federal agencies. In 1962, it set up the Committee on Scientific and Technical Information to oversee the Government's scientific information systems. The National Defense Education Act of 1958 ordered the National Science Foundation to look into ways of indexing and organizing scientific information and, in response, the NSF established an Office of Science Information. Several bodies aided the exchange of information between agencies, including the Science Information Exchange (1960), which by 1965 had a combined Federal-State file of 13,000 projects; the Clearinghouse for Federal Scientific and Technical Information (1964), which distributed technical documents; the National Referral Center of the Library of Congress, which provided aid in finding information resources; and the Joint Publications Research Service (1957) of the Department of Commerce, which translated and abstracted foreign language research.

The Debate on Coordination

Agricultural administrators showed the same concern for better research coordination that was appearing in other parts of the Government. In the midsixties, both administrators and Congressmen came to the conclusion that agricultural research was not proceeding as well as it could and that another effort had to be made to achieve overall coordination. The Southern Marketing Research Committee in 1963 and the Agricultural Economics Research Advisory Committee in 1965 both pointed to the lack of coordination as a major failing of the research system. According to the former group, the problem with Southern marketing research lay "in the shortage of basic planning data...and in the absence of closely knit research programs for the region." The committee criticized the organization of marketing research by commodity and recommended the appointment of a technical administrative coordinator for the South. 184/ Food and Agriculture: A Program of Research by USDA and the SAES's (1962) urged better coordination through annual evaluations and more interdisciplinary work. 185/

184/ Southern Marketing Research Committee. "A Framework for Marketing Research in the South." 1963, pp. 13-19.

185/ U.S. Department of Agriculture. Food and Agriculture. Part 1, p. 25; Committee on Agricultural Science. "Report of Committee on Agricultural Science Regarding Food and Agriculture--A Program of Research." Feb. 5, 1964, p. 6.

These pro-coordination views were disputed within the Department, especially among agricultural economists such as Malter Miklius and John O. Gerald. Miklius and Gerald argued that economic research and researchers were not well suited to coordination. Individual researchers, they felt, usually made a wise choice of projects on their own. 186/ Other economists, though, wanted more coordination, including James Shaffer of Michigan State University whose 1968 study of agricultural economics research called for better coordination within ERS by reorganizing into task forces on individual problems. Both Shaffer and Kenneth Farrell of ERS suggested that regional research would work better if handled by interstate consortiums on particular areas. 187/

Research Under the Long-Range Study

In general, Congress favored coordination and this is the direction in which the Department moved. Studies in the sixties favored a greatly increased and more unified agricultural research program. Food and Agriculture supported a substantially bigger research effort with better links between government and industry, which now did about 58 percent of agricultural research. 188/ In 1963 and again in 1965, the Senate Appropriations Committee urged the Department to establish a joint USDA-SAES research review committee to make a thorough evaluation of all government agricultural research. The Department created such a committee to examine long-range research needs in 1965. The committee's 1966 report, "A National Program of Research for Agriculture" (the so-called Long-Range Study), was the most important statement of its type since the RMA. In addition to recommending an expanded research program, the committee concluded that the diverse USDA-SAES cooperative research system was better than any

186/ Walter Miklius and John O. Gerald. "Problems in Implementing Coordinated Marketing Research." Paper presented at the Association of Southern Agricultural Workers Conference, Jan. 30, 1967; Miklius and Gerald, "Research Coordination or 'Invisible Hand'?" Journal of Farm Economics. Vol. 49, Aug. 1967, pp. 756-59.

187/ James Duncan Shaffer. "A Working Paper Concerning Publicly Supported Economic Research in Agricultural Marketing." Econ. Res. Serv. 1968, pp. 25-27; Kenneth R. Farrell. "A Framework for Marketing Research in the South: Evaluation and Recommendations." Paper presented at the Association of Southern Agricultural Workers Conference, Feb. 7, 1968, p. 11.

188/ U.S. Department of Agriculture. Food and Agriculture. Part 1, p. 5 and passim; Committee on Agricultural Science. "Report on Food and Agriculture." 1964, pp. 1-7.

single, unified arrangement but cited the "need for better balance and coordination among the various research efforts." 189/ The report made a number of administrative suggestions including the appointment of an assistant secretary for science, broader utilization of contracts and grants beyond the land-grant university system, and the use of ad hoc committees by the Agricultural Research Planning Committee to study particular subject areas on a continuing basis. The Long-Range Study spawned further studies in specific areas. For example, a 1969 report by the Joint Task Force of Marketing and Competition not only asked for more money for marketing economics research, but urged a broader systems-oriented approach that would bridge the gap between disciplines. Because of increasing concentration in the marketing industry, the task force recommended much more research on competition, systems analysis, group action, and developing domestic markets. 190/

One of the most important recommendations of the Long-Range Study was a revamping of the central project file by putting it on computer. A Department task force appointed in 1964 had made a similar proposal and with the backing of the Long-Range Study this was put into effect in April 1966 in the form of the Current Research Information System (CRIS). CRIS contained a listing of all agricultural research projects within USDA, the SAES's, and a few other cooperating institutions. It was an entirely new listing rather than a continuation of the old central project file and it required 3 years before CRIS was ready to begin operation. In addition to naming each project and its authors, CRIS included a description, the termination date, and current progress. By 1976, CRIS contained some 24,000 research work unit descriptions. CRIS greatly improved access to information within the USDA-SAES system but was criticized because access was difficult for people outside. 191/ The National Agricultural

---

189/ Association of State Universities and Land-Grant Colleges and U.S. Department of Agriculture. A National Program of Research for Agriculture. 1966, pp. 202-03; U.S. Congress, Senate Appropriations Committee. Report to Accompany H.R. 6754. 1963, pp. 4-5.

190/ Kenneth R. Farrell and C. Peairs Wilson. "A National Program of Research for Marketing and Competition." U.S. Dept. Agr. 1969, pp. 5-9. U.S. Congress, House Committee on Agriculture. Marketing Research Activities of U.S. Department of Agriculture. 1971, p. 21.

191/ U.S. Department of Agriculture. "Current Research Information System." Apr. 12, 1976; Jim Hightower. Hard Tomatoes, Hard Times: The Failure of the Land-Grant College

Library (NAL) also became involved in coordinating information through its clearinghouse which oversaw publication exchanges and maintained records of bibliographies and translations. NAL began publishing its card catalog in book form for distribution to other libraries in 1967.

The sixties also witnessed a losing struggle by the State experiment stations to maintain their position in the universities, a struggle that had an effect on research coordination. Nonagricultural parts of land-grant colleges and universities had been growing rapidly since before World War II. By the sixties, experiment stations, once a primary reason for the land-grant universities' existence, had become just a small entity in a large educational structure. Federal funding for land-grant institutions had been mostly from the Department of Agriculture. Now it also came from the Defense Department, NIH, NSF, HEW, NASA, and other Federal sources. The decline of the SAES's within the universities was reflected in the increasing difficulty they had in obtaining funds both from Congress and the States. As the growth in funding slowed, SAES directors lost much of their flexibility in shifting money to new projects and, with it, much of their ability to coordinate projects within a national research plan. As SAES's were considered less important by legislators, station directors had to rely more on university administrators to lobby for funds. Unfortunately, administrators often gave a low priority to agriculture. SAES directors believed they were also losing to ARS in congressional appropriations. To correct the balance, ESCOP successfully lobbied for a 1965 Act which gave the Secretary authority to make grants to SAES's and other research institutions, private organizations, and individuals. The major impact of this law was on the 1890 institutions.

ESCOP was also instrumental in pushing through the Long-Range Study which was conducted jointly by USDA and the experiment stations. The Long-Range Study recommended further joint planning by those two groups and the Agricultural Research Planning Committee, which was almost equally divided between the two. When ARPAC was created in 1969, however, it represented a victory for the SAES's competitors in the universities--the administrative heads of colleges of agriculture and the extension services. The chairman of ESCOP was replaced by a land-grant university president as co-chairman of ARPAC with the director of science and education. The Federal Extension Service also received a slot on ARPAC. ESCOP tried to increase the influence of the SAES's

---

Complex. Agribusiness Accountability Project, 1972, pp. 241-42.

on Capitol Hill by establishing a professional lobbyist there, but the plan fell through. Thus, by 1970, the experiment stations had considerably less influence on appropriations than they had a decade earlier. 192/

In the late sixties and early seventies, the agricultural research program continued to receive favorable treatment from Congress but marketing researchers increasingly felt that their role was diminishing. The Long-Range Study did not place a very high priority on marketing work, recommending a drop from 6 percent to 5 percent of the total scientist man-years devoted to marketing. Marketing research came under attack in this period for its fragmentation and lack of theoretical underpinning. 193/ Among agricultural economists, much of the debate in the sixties centered on the need to broaden the scope of research to meet changing social needs. This seemed to leave less of a role for traditional marketing research. 194/

Funds for marketing research grew from $10.6 million in 1965 to $14.4 million in 1971, but this increase was due mainly to the requirement that 20 percent of Hatch Act money be used for marketing research. Between 1965 and 1971, marketing's share of total SAES research expenditures slipped from 6.5 percent to 6.2 percent while other research programs, such as forestry research under the McIntyre-Stennis Act (1962), grew. Furthermore, in order to meet the 20 percent requirement, the definition of what constituted marketing was broadened in the sixties to include recreation, pesticides,

---

192/ J. C. Williamson, Jr. "Comments on Coordination Developments in Publicly Funded Agricultural Research, 1965-1979." Unpublished, Mar. 5, 1979.

193/ U.S. Congress. Marketing Research Activities. 1971, pp. 63, 85; Willard F. Williams. "Toward Improved Performance in Agricultural Marketing Research," Journal of Farm Economics. Vol. 48, Aug. 1966, Part 2, pp. 37-52; Hightower. Hard Tomatoes. 1972, p. 117.

194/ Ben C. French. "On the Failures of Agricultural Economics and the Design of a Better Research Information System." Paper developed for a joint seminar of the Econ. Res. Serv. and Farmer Coop. Serv., Apr. 18, 1974, pp. 2-9; Advisory Committee to the Administrator, Econ. Res. Serv. "Providing Economic Knowledge for the Food and Fiber Sector. Nov. 1972, pp. 54-59; Shaffer. "Working Paper." 1968, pp. 17-25.

marketing of inputs, and other areas. 195/ A survey published in 1973 found that, while directors of experiment stations supported greater emphasis on marketing research, heads of agricultural economics departments wanted to reduce marketing work. These attitudes were reflected in a shift of funds from the economics of marketing to marketing technology and a decline in the number of graduate students in marketing economics. The percentage of marketing research devoted to technology increased from 39 to 57 between 1960 and 1970. Remaining marketing economics research centered around aggregate and systems problems rather than studies of individual firms, as it had earlier. 196/ One area of marketing research that came in for cutbacks was wholesaling and retailing research which primarily benefitted small business. During the mid-sixties, the Department repeatedly proposed eliminating this research but each year Congress restored its funds. By 1970, the administration was withholding some of the money appropriated for wholesaling and retailing. 197/

The overall relative decline in marketing research disturbed many of those in industry who depended on USDA work. The United Fresh Fruit and Vegetable Association, for example, complained in 1969 that "the effectiveness of the Department's program has slipped during the past few years." It urged a return to the idea of a unified marketing administration that

---

195/ U.S. Congress, Senate Appropriations Committee. Hearings ...Agricultural Appropriations, 1967. Pp. 533, 790; House Appropriations Committee. Hearings...Agricultural Appropriations, 1973. Part 1, p. 306, Part 3, p. 698; H. B. Metzger. Marketing Research at State Agricultural Experiment Stations, Past, Present, Future. Washington, Coop. State Res. Serv., 1973, pp. vi, 8-12; ESMRAC Minutes. Oct. 1961, May 1963, May 1967, Oct. 1969, Nov. 1972; T. C. Boyd to experiment station directors, Oct. 2, 1964, filed with ESMRAC Minutes.

196/ Metzger. Marketing Research, 1973. Pp. vii, 12-14; Dale L. Anderson. "White (or Slightly Grey) Paper in Defense of 'Agricultural Marketing' Research." Jan. 6, 1977, pp. 2-6; ESMRAC Minutes. Feb. 1972.

197/ U.S. Congress, Senate Committee on Appropriations. Hearings...Agricultural Appropriations, 1969. Pp. 1,282-83; House Committee on Appropriations. Hearings...Agricultural Appropriations, 1970. Part 2, pp. 127-28; 1971, Part 2, p. 260; House Committee on Appropriations. Proposed Reductions in Agricultural Research...Hearings, 1965. pp. 26-28.

was proposed by the RMA. The National Farmers Union called marketing research funds a "pittance" compared with production research and blamed the lack of it for the low percentage of the consumer's dollar going to farmers. It asked for a large increase in funding, an Assistant Secretary of Agriculture for Marketing Research, and the restoration of the commodity advisory committees. 198/ In 1971, the 25th anniversary of the RMA, Congress held hearings to reassess the act and its accomplishments. While USDA officials were upbeat about progress under RMA, industry representatives almost uniformly criticized the marketing research program as inadequate and uncoordinated and many asked for a return to a single marketing administration. 199/

The Regionalization of the Agricultural Research Service

In 1972, ARS was reorganized along regional lines in a way that displeased those congressional leaders who favored more centralized control of research. The reorganization came as a surprise. When the director of science and education, Ned Bayley, appeared before Whitten's Subcommittee on Agriculture just before the new plan was to be announced publicly, he admitted that only about 10 people in ARS knew about it. 200/ Bayley and ARS administrator T. W. Edminister proposed decentralizing the ARS structure in order to simplify lines of authority.

They believed that, as a result of expanding the ARS budget more than five times since 1953, relations between the Washington office of ARS and its field laboratories had become burdened with layers of bureaucracy. At the Georgia Experiment Station in Tifton, to cite a particularly bad example, ARS had programs involving all four deputy administrators, seven divisions, and 15 branches. Communications between different organizational units involved going through someone in Washington. Of the 250 field locations across the country, 85 involved work by two or more ARS divisions. 201/

198/ United Fresh Fruit and Vegetable Association. "Statement to the Marketing Advisory Committee." June 10, 1969; National Farmers Union. Washington Newsletter. Sept. 12, 1969.

199/ U.S. Congress. Marketing Research Activities. 1971, pp. 57-63, 69-70, 85-86, 106-07.

200/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1973. Part 6, p. 1266.

201/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1973. Part 6, pp. 1256-91.

By placing one deputy administrator in each of the four regions, a good deal of the supervisory work could be located close to where the research was actually done, in the regional laboratories, and the State experiment stations. Within each region were several area offices, 29 in all. A national program staff, with four assistant administrators taking different subject areas, remained in Washington to provide overall planning and coordination. For marketing, the marketing, nutrition, and engineering sciences staff contained specialists on marketing, market quality, processing, and transportation. Directly assisting the administrator was a program analysis and coordination staff which advised on planning and budgeting. Under the new plan some 30 administrators would be able to return to research work. 202/ The Department announced the new organization on April 21, 1972. Congressman Whitten and others on the House Appropriations Committee strongly opposed reorganization on the grounds that it made a truly national research program and congressional oversight more difficult. However, the Secretary was able to proceed without congressional approval.

ARPAC recommended an expanded regional and national research planning and implementation system in 1972. A Regional Planning Committee was to be established in each of the four regions. Regional Planning Groups for six subject matter areas would supplement these. If needed, Research Program Groups might be established for subdivisions of the subject matter area. Research planning would flow from the States to the Regional Planning Committee, to the National Planning Committee and then to ARPAC. This plan, implemented in 1974, would establish guidelines, monitor performance, review regional reports, and evolve a national plan. 203/

Following the reorganization and the assignment of research to regional offices, ARS established a Marketing Research Coordinating Committee, headed by the national program staff, with marketing research representatives from each region. They received recommendations for research, but no increases were requested. The committee was abolished in 1976. An interagency

---

202/ U.S. Department of Agriculture. ARS Administrator's Letter. Apr. 21, June 20, 1972; U.S. Congress, House Committee on Science and Technology. Agricultural Research and Development: Special Oversight Hearings. Part 2, 1975, p. 69.

203/ Metzger. Marketing Research. Agricultural Research Service, 1973, pp. vi, 6; U.S. Congress, House Committee on Science and Technology. Special Oversight Review, 1976, p. 88.

board was also established to coordinate USDA marketing research, but was not utilized. This led the American Farm Bureau Federation to charge that research was fragmented and that production oriented leadership further reduced the effectiveness of the research program. 204/

Congressman Whitten continued to be critical of the ARS reorganization. He conceded that it was easier for the administrator, but felt that the closer researchers were to the heart of the Department, the more effective the research was. Conversely, the more regional intermediaries there were, the poorer it became. He deplored the fact that the work had been carried out to the field and charged that people in area offices were having difficulty getting through to regional offices. 205/

Then-Congressman Andrews joined Whitten in his criticism of the ARS reorganization contending that it had added another layer of bureaucracy and made it increasingly difficult to get firm decisions on research. 206/

The negative criticisms of agricultural research had created an unfavorable attitude resulting in restricted appropriations by State legislatures and the Federal Congress. 207/ When William Hueg, a director of the Minnesota Experiment Station, testified at the 1975 oversight hearings, he said: "No matter how well the planning effort is constituted or designed, if there's failure in funding, the program is only going to mark time. I believe that's the situation that exists right now." 208/

204/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1975. p. 669; 1979, Part 8, pp. 897-98.

205/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1975. Part 4, p. 569; 1978. Part 5, p. 766; 1979, Part 7, p. 266.

206/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1977. Part 3, pp. 868-69.

207/ Agricultural Research Institute. Proceedings. 1973, pp. 27-28.

208/ U.S. Congress, House Committee on Science and Technology. Oversight Hearings. 1975, p. 591.

The report of a special investigation directed by the House Appropriations Committee in 1972 brought out some of the problems that existed in ARS under the new organization and the responses to them. Marketing research in ARS was described as being directed toward increasing marketing efficiency by reducing product losses and costs and improving methods of quality identification and measurement, including solutions to problems encountered in handling, storage, grading, and distribution of products from the farm to the retail stores. ERS officials reported that its studies covered the complete range of activities from inputs to retailing. The impact of Cooperative State Research Service on research, it reported, had shifted as visits to the stations became less frequent. It became more difficult to terminate unsuccessful projects or shift priorities, since States would continue projects under other funds. The National Research Council's 1972 study, the so-called "Pound Report," sharply criticized central research planning and advocated a greater voice for scientists in choosing projects, less earmarking of funds, and a reduction of field laboratories. The committee found the amount of low-quality agricultural research "appalling," especially at the Federal level, and recommended more money for the State stations and greater involvement of scientists in reviewing projects. 209/

Homer Metzger's extensive in-house evaluation of the research program, Marketing Research at State Agricultural Experiment Stations: Past, Present, and Future, appeared in 1973. Metzger found marketing research "languishing," with marketing economics especially lacking vigor. He recommended the establishment of marketing research centers at selected stations and closer working relations with government agencies. He advocated that the stations strengthen their ties with their clientele, adopt a systems orientation, and shift emphasis to new problem areas pertaining to marketing organization and structure. 210/

The position of director of science and education was allowed to lapse early in 1973 and functions were assumed by the new assistant secretary for conservation, research, and education. Ned Bayley, who had been director, held a staff position to

---

209/ U.S. Congress, House Appropriations Committee. Hearings ...Agriculture Appropriations, 1975. pp. 55-56, 423-504; National Research Council. "Report of the Committee on Research Advisory to the U.S. Department of Agriculture," 1972.

210/ Metzger. Marketing Research. 1973, p. iv.

develop methods for evaluating and coordinating research, a change that placed more of the overall responsibility in the Office of the Secretary. 211/

Reorganization of Economic Research

A major reorganization in the Economic Research Service also occurred in 1973. The Divisions of Farm Production Economics, Marketing Economics, and Economic and Statistical Analysis were abolished. In their place were established the Commodity Economics and National Economic Analysis Divisions with a less formal structure of groups, and later program areas, in place of branches. Matrix groups or task forces would conduct particular assignments, drawing on personnel from the program areas. A net result was an increase in the staff of the administrator and the division directors. Shortly thereafter, the administrator of ERS, Quentin West, indicated his concern about the impact of research on people and communities. However, by this time, marketing research no longer existed as a separate activity within ERS. Instead, attention was directed to a vertical production marketing commodity system. 212/

When A. B. Carr of USDA's Office of Planning and Evaluation reviewed the marketing research program in 1974, he reported that the States were finding it difficult to meet the 20 percent requirement under the Research and Marketing Act. Marketing research was being given less attention with new economists trained as quantitative economic analysts rather than as marketing specialists. But some felt that there was still more interest in marketing research in the States than in ERS. 213/

Ben French from the University of California at Davis prepared a paper for a joint ERS-FCS seminar on agricultural economics research in 1974. After a critical review of studies made during the 15 years previous, he turned his attention to a proposal that he felt would improve overall coordination of research. He felt that there was not sufficient awareness of the possibilities within the new ERS reorganization. In place of two divisions there should be 15 national information

---

211/ ESCOP Minutes. Feb. 8, 1973; Secretary's Memo., No. 1803. Feb. 28, 1973.

212/ Baker and Rasmussen. "Economic Research." 1975, pp. 68-70; Quentin West. "Economic Trade-offs Between Efficiency and Equity," Agricultural Science Review. Vol. 11, No. 1, pp. 31-34, 1973; ESCOP Minutes. Feb. 12-14, 1974.

213/ A. B. Carr. Evaluation of Hatch Marketing Research Program, Sept. 18, 1974; Lloyd Halvorsen to Roy Lovvorn, Oct. 21, 1974.

centers, organized by commodities or subject areas, including market development. Such centers would, by channelling all economic research project information, make the CRIS system more effective. Supplementing the centers would be a set of research information directories with information on ongoing programs, associations, agencies, and people. 214/

CRIS continued to be a subject for discussion. At one stage, the director of science and education agreed that its reports were of such poor quality that he recommended they be discontinued in their existing form. Scientists found that information was either inadequate for use or outdated. By 1975 the Agricultural Research Policy Advisory Committee (ARPAC) recommended that an in-depth study of CRIS be made and the Committee of Nine proposed that the study be broadened to include recommendations to improve input procedures. A CRIS Operations Council, composed of representatives from ERS, SRS, ARS, FS, and State representatives from each of the four regions, was formed. 215/

By this time there was considerable discussion about including industry research in the CRIS system. However, the problem of the proprietary rights information prevented this. A parallel to CRIS, the Current Agricultural Research Information System (CARIS), was established by the Food and Agricultural Organization of the United Nations in 1975. 216/

Under the Technology Assessment Act of 1972, the Office of Technology Assessment had been established in the legislative branch of the government to provide assessments for congressional committees. Policies were to be set by a Technical Assessment Board, assisted by the Technical Assessment Council. However, a complicating factor was the existence of the Federal Regional Council System, broadened in 1973 to include coordination of all direct Federal program assistance to State

---

214/ Ben French. "On the Failures of Agricultural Economics and the Design of a Better Research Information System." Apr. 18, 1974.

215/ U.S. Congress, House Appropriations Committee, Hearings ...Agriculture Appropriations for 1975, Part 1, pp. 458, 464-65; 1978, Part 5, pp. 856-58; Committee of Nine, Minutes, Apr. 16-17, June 19-20, Dec. 3-4, 1975; ARPAC."The Current Research Information System,"Jan. 1975; U.S. Congress, House Committee on Science and Technology. Oversight Hearings, 1975, Part 2, pp. 258-61.

216/ U.S. Congress, House Committee on Science and Technology. Oversight Review, 1976. P. 58.

and local governments. 217/ On December 9, 1975, another committee, the Committee on Food and Nutrition Research, was established in the Federal Council for Food and Technology to promote planning and coordination of food research in the Federal Government and with other public and private research organizations. 218/

From time to time task forces were established to prepare studies for the Secretary. One, the Cotton Marketing Task Force, was appointed on January 8, 1974. Composed of representatives from seven agencies, it was to identify the major problems, draw up alternatives for improving the marketing system, and recommend the best course of action with a minimum of government regulation. Pursuant to the report of the task force and hearings held by the House Agriculture Subcommittee on Cotton, the National Cotton Marketing Study Committee was appointed to investigate areas discussed in the report and the hearings. 219/

On January 11, 1974, the Department and the land-grant college association adopted a memorandum of understanding establishing the National Planning Committee in place of ARPF. This spelled out the operation of the regional planning committees, the national committee, and ARPAC.

By 1974, there was a realization that U.S. agriculture had exhausted the pool of unused technology which might be expected to yield quick results if it were available. Farmers were taking advantage of research almost at once. There was a call for substantial public investment in agricultural research and technology. Even though funds for the experiment stations had been lagging, funds for agricultural research in general increased during the seventies. 220/ ARS research funds rose from $144 million in fiscal year 1969 to $223 million in fiscal year 1975. Between 1965 and 1975, agriculturally related research by the NSF increased from over $6.5 million

---

217/ Secretary's Memo. No. 1825, Sept. 17, 1973.

218/ U.S. Congress, House Committee on Science and Technology. Oversight Review. 1976, p. 88.

219/ Secretary's Memo., No. 1835, Jan. 8, 1974; No. 1852, Oct. 22, 1974.

220/ Nat. Assn. of State Univ. Proceedings. 1974, p. 49.

to nearly $33.5 million or from 1.60 percent to 4.85 percent of the NSF budget. 221/

In June 1974, ARS appointed a number of scientists as technical advisors to improve interscientist communication and promote coordination of regional and national research. They were to devote not more than one-third of their time to complementing and reinforcing the work of the National Program Staff, the program planning and review staffs, area directors, research leaders, and the Program Analysis and Coordination Staff. The National Program Coordinator would serve as ARS's chief advisor and coordinator on scientific affairs. However, as time passed technical advisors were reported as failing to review technical aspects of ongoing work, were not authorized additional travel funds for advisory duties, and had not aided coordination. 222/

Congressional Review of the Agricultural Research Service Reorganization

In October 1974, the House Appropriations Committee asked its investigative staff to review the impacts of the ARS reorganization on the agency's work. It found reports of relatively widespread discontent, but there were those who felt that nonetheless, the clock could not be turned back. It also reviewed the reports of the Committee on Research Advisory to USDA, the Committee on Impact of ARS-USDA Reorganization on the Profession of Entomology from the Entomology Society of America, the House Appropriations Committee's report on utilization of Federal laboratories, and the General Accounting Office review. 223/

The 1975 review showed that the National Program Staff "was generally not doing the job expected of them, that is,

---

221/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations for 1971. Part 2, pp. 66; Senate Appropriations Committee. Hearings...Agricultural Appropriations, 1976, Part 1, p. 577; House Committee on Science and Technology. Oversight Hearings. 1975, p. 1127.

222/ U.S. General Accounting Office. Management of Agricultural Research: Need and Opportunities for Improvement, Department of Agriculture, 1977. pp. 35-36; U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1981. Part 6, pp. 15-18.

223/ U.S. Congress, House Appropriations Committee. Hearings ...Agriculture Appropriations, 1976. Part 2, pp. 353-69.

providing coordination and leadership of a still undefined national program." The lack of national leadership was filled by the four regional offices that some felt were "four mini-ARS's." When it looked at ARPAC, it found that because the national and regional committees were composed of high-level administrative personnel they did not have time enough for both ARPAC and their regular work, they had only temporary staffing, and had met only twice in the previous 2 years. Insofar as one experiment station official was concerned "the States have their own priorities and do not want to be dictated to by another State or by ARS." An ARPAC official reported that communication had been improved and that as much as could be expected had been achieved in planning, but not much had been done in coordination. He felt that if the research efforts of ARS and the experiment stations were to be coordinated, ARPAC was the agent, but he questioned whether the goals set were attainable.

The investigative staff saw many similarities between the old and the new structure. The major change appeared to be that funding under the new structure went from the administrator to the regions, whereas formerly funding was handled primarily by the divisions. Meanwhile, the Committee of Nine recommended that the State agricultural experiment stations take the leadership in coordinating regional research with other agencies. ESCOP's Committee on Marketing Research suggested that there might be greater need for such coordination in marketing research than in other forms of research. It also urged closer cooperation with ERS and the Statistical Reporting Service (SRS). Perhaps the latter problem had arisen from professional separatism between the scientist and the economist. This committee was redesignated as the Committee on Marketing Research Coordination. However, Melvin Janssen, who was on detail from ERS to CSRS, reported that it was not easy to determine what marketing research was being undertaken, especially after the Marketing Research Division was abolished in ERS. The agency did not seem to be interested in continuing the detail of personnel. The question was raised as to its commitment to developing mechanisms for improved research planning with the universities. Moreover, ERS was dealing with department heads instead of through the experiment station directors. 224/

224/ ESCOP Minutes, Feb. 1976; ESCOP Marketing Research Committee, Minutes. Apr. 29 and May 8, 1975; Allen Johnson to Quentin West and others, May 12, 1977.

Also in 1975, CSRS, in accordance with Secretary's Memorandum 1778, which provided for a planning and budgeting system, selected the marketing research program as a subject for evaluation and study. Various approaches were suggested including a contractual review. CSRS favored an evaluation that would include proposals for strengthening research by new mechanisms for planning and coordination. Kenneth Farrell of ERS expressed his concern about the multiplicity of coordinating agencies that took time but did not necessarily lead to greater coordination. Moreover, he advocated the establishment of a national food and agricultural policy institute. 225/

Other Studies of Agricultural Research

On May 19, 1977, ARPAC called for a committee on coordinating marketing research to develop new and innovative approaches. Such a committee was appointed on November 16, 1977. The committee held a number of meetings and was authorized by the Joint Council to continue its study. The question of its progress came up at a number of ESCOP meetings. Finally, on October 22, 1979, the Joint Council appointed a special committee of four to complete as much of the work as possible. 226/

Ned Bayley's speech before the Research Conference at the Virginia Polytechnic Institute and State University on April 9, 1974, had been a harbinger of future ARS policy. He laid out the goals and objectives, programs, and project planning, using a management approach. The new program structure for ARS, Management and Planning Systems (MAPS), was established in 1975 for planning and evaluating research alternatives. MAPS built on CRIS. Edminister maintained that MAPS had been created on the premise that ARS research

---

225/ Lloyd Halvorson to ESCOP Marketing Subcommittee Membership, Apr. 30, 1975 and Oct. 13, 1976; ESCOP Marketing Committee Minutes, May 8, 1975; Kenneth Farrell. "Public Policy, the Public Interest and Agricultural Economics," American Journal of Agricultural Economics. Vol. 58, No. 5, Dec. 1976, pp. 785-94.

226/ ARPAC Committee Summary, Nov. 19, 1977; M. Rupert Cutler and Orville Bentley to Dale Anderson, and others, Nov. 16, 1977; A. R. Bertrand and J. S. Robins to Olan Forker and others, Oct. 22, 1979.

could be planned, evaluated, and managed as a whole. 227/ To ESCOP, however, it appeared that ARS was coming up with a new effort that might compete with the joint regional and national planning effort. The scope of ARS research was expanded when the agency began to conduct research supported by outside contributors, such as commodity associations, State agencies, and others. 228/ In fiscal year 1977, ARS instituted a revised planning system in which it classified its research under 67 national and 8 special research programs, developing a long-range planning document for each program area to be updated every 5 years. 229/

As increasing attention was being given to world food needs in 1975, the Department's 1975 Young Executive's Committee decided upon USDA's role in dealing with world food problems as its area of study. In its report, the committee stressed the importance of coordination with task forces being organized on multidisciplinary problems. The committee also suggested that USDA establish "extramural research grants, on an open competition basis" to scientists in land grant and nonland-grant institutions. 230/

Priorities in ERS were shifted from marketing research to other areas, as Quentin West in 1973 termed it "to what happens to people and their communities." By 1978, the ESCS (successor agency to ERS) budget included a proposed decrease of $600,000 for analyses of marketing of farm products. Some activities were slated to be dropped and others cut, reflecting the radically changed nature of markets. The Federal-States

---

227/ U.S. Congress, House Committee on Science and Technology. Oversight Hearings. 1975, pp. 69, 612, 685; ESCOP Minutes, Nov. 9, 1975; Ned Bayley. Can We Plan Research. Res. Bull. 100. Va. Polytech. Inst. and State Univ., Blacksburg, Va., Dec. 1974, pp. 12-21; U.S. Department of Agriculture, Agricultural Research Service. Management and Planning System. 1975, 75 pp.

228/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1976. pp. 208-09; 1977. p. 132; ESCOP Minutes. Feb. 1976.

229/ U.S. General Accounting Office. Management of Agricultural Research. 1977, p. iii.

230/ Young Executive's Committee. World Food--USDA's Commitment to Development Assistance and Research. Dec. 1975, 39 pp. Not an official USDA publication.

Relations Committee drew up a resolution deploring USDA's role in allowing the marketing efficiency research program to deteriorate to the lowest point since the 1946 act. The committee recommended combining marketing research in AMS. Actually, marketing studies had declined from 1,049 scientist-years in 1969 to a proposed 648 in 1979. The Farm Bureau also advocated combining marketing work in one agency, with increased emphasis on expansion of agricultural exports. 231/

Marketing research within ARS placed much emphasis on technology such as improvements in processing and handling and insect detection methods. Marketing work within ERS consisted of analysis of market structure and performance, including estimating marketing margins, studies of the sugar industry, the away-from-home food market, the impact of rail reorganization on rural areas, and a review of marketing orders. In 1977, ERS, AMS, and ES became involved in a proposal for direct marketing and a study of the effects of beef-grade changes. Marketing research under the general supervision of the CSRS tended to be geared more to scientific rather than economic questions. Thus, in 1975, the State stations worked on such topics as uniform ripening of fruit, apple packing, vacuum-packed beef, mechanical harvesting of strawberries, organization of a grain distribution system, and the effect of beef imports on American farmers. 232/

Agricultural research was the subject of numerous studies and conferences during the midseventies. A joint task force of the Southern region agricultural experiment stations and USDA made a study of marketing and competition research in the Southern region, releasing its report in September 1974. It saw the South as the "one region that has the land, water, labor and capital needed to expand food and fiber." This in turn, would necessitate the expansion of marketing activities and expanded or redirected marketing research. The report cited the difficulty of coordinating such efforts. Having established problem areas for research, priorities and objectives were determined. It recommended that task-force

---

231/ Quentin West. "Economic Trade-Offs Between Efficiency and Equity," Agricultural Science Review. Vol. 11, No. 1, 1973, pp. 31-34; U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1974. Part 5, pp. 617, 687; 1979. Part 5, pp. 938-41; Part 8, pp. 898, 904.

232/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1979. Part 5, pp. 642, 694-695; 1976, Part 4, pp. 494-95.

type research teams be established to work with industry groups on region-wide application. The World Food Conference was convened in Rome, Italy, in November 1974 under the sponsorship of the United Nations. This was followed by a request by President Ford, on December 3, 1974, that the National Science Foundation develop recommendations on how research might best be applied to meet challenges raised at the conference. An interim report and the report of the NSF Board of Agriculture and Renewable Resources (BARR) were sent to the President in November 1975. The reports stressed the need for greater participation of U.S. agricultural researchers in international research. The increasing concern over the energy situation was reflected in attention to the relationship between energy and the food delivery system: production, processing, and preparation. 233/

ARPAC sponsored a national conference in Kansas City in July 1975 to identify the most important research problems to be faced by the United States in increasing its domestic and world food supplies in the next 10 to 15 years. The conference included representatives from government, universities, farming, agribusiness, the press, and others. Agricultural marketing and distribution were among the subjects discussed. Attention was also directed to research capabilities in the Federal Government, the States, private industry, private foundations, and international groups. ARPAC soon appointed two committees to develop further plans. 234/

The Agricultural Research Institute (ARI), which had long been interested in the Department's research, felt that its independent status allowed it more input on government policies relating to agricultural research. By 1975, ARI and BARR had drifted apart and needed to mend fences if ARI was to have an effective input into national policy. When it met the following year. ARI devoted its attention to developments which were to culminate in the research provisions of the Agricultural Act

---

233/ Joint Task Force of the Southern Region Agricultural Experiment Stations and the U.S. Department of Agriculture. Marketing and Competition Research in the Southern Region: Problems and Priorities for Agriculture, Sept. 1974, 37 pp.; Glenn Pound. "The Development of the Agricultural Research Structure in the United States." Nov. 14, 1979, p. 25.

234/ General Accounting Office. Agricultural Research: Its Organization and Management. 1976, pp. 14, 65, 73; Agricultural Research Policy Advisory Committee. Research to Meet U.S. and World Food Needs. 1975; "Report of the Working Conference on Research to Meet U.S. and World Needs: An Interpretive Summary." 1975, 7 pp.

of 1977. Richard T. Crowder, vice president of the Pillsbury Company gave the industry view of research needs at the 1976 annual meeting of the American Association of Agricultural Economists. The proceedings of the 1977 ARI meeting included several speeches on agricultural research, a summary of Title XIV of the act, research in the land-grant university system, and a report of a survey of agricultural research by private industry by a committee appointed in 1975. This report recognized the need for increased support and innovation. 235/

On April 9, 1976, the General Accounting Office released its review study of ARS, CSRS, FS, and ERS work. GAO still credited CSRS with maintaining cooperation within and between States and planning and coordinating research between the States and USDA. CSRS also conducted two types of reviews--special reviews at the request of the State institution by panels that could be composed of scientists from industry, other State institutions, CSRS, and other USDA research agencies; and subject matter reviews conducted by CSRS of research programs and accomplishments. 236/

On August 23, 1977, GAO released another report essentially a followup on the previous report. It charged that the planning for agricultural research was fragmented and a national agricultural research program had not been maintained. It also pointed out that ARS needed to improve its planning, selecting, and reviewing research and recommended an agency-wide peer review for judging research proposals. GAO also recommended that a national agricultural research plan be established that would provide for correlation between areas. The report included an appendix of national and special programs with a breakdown for agricultural marketing efficiency, technology, and agricultural exports. 237/

235/ Agricultural Research Institute. Proceedings. 1975, pp. 51, 55; 1977, p. 6; Richard T. Crowder. "Research Needs and Priorities in the Food System: An Industry Viewpoint," American Journal of Agricultural Economics, Vol. 58, No. 5, Dec. 1976, pp. 991-99.

236/ U.S. General Accounting Office. Agricultural Research: Its Organization and Management. 1976, pp. 28, 32-33.

237/ U.S. General Accounting Office. Management of Agricultural Research: Need and Opportunities for Improvement, 1977, p. 56; U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1979. Part 7, pp. 370-81.

Emerson M. Babb from Purdue University prepared a report for the CSRS on marketing research at the State stations. He, too, asked the stations to state their concerns. He concluded that the impacts of the marketing research funding requirement included: increased research effort; greater importance given marketing problems; efforts within particular disciplines changed; slight decline in resources over a 10-year period; and no substitution of Federal for State funds on Hatch projects. A supplemental report identified factors that reduced marketing research productivity and value of output. 238/

In 1976, two subcommittees of the House Committee on Science and Technology reported on their review of agricultural research and development. Hearings had been held in 1975. The report gave little emphasis to marketing research. However, it called for the following: (1) a clearly defined national policy for agricultural research, (2) the inclusion of agricultural scientists in the highest levels of national science policymaking, (3) an examination of the leadership role of USDA in federally funded agricultural research, (4) improved exchange of information between the public and private sectors (though it recognized that there were proprietary problems in including industry in CRIS), (5) widened use of competitive awards of research grants to the greatest variety of research institutions possible, (6) increased use of special reviews by CSRS, (7) centralization of research that is national in scope, (8) recognition of excellence in agricultural research, (9) increased support for research needed to meet future U.S. and world needs, (10) assumption of most basic agricultural research by USDA with the National Science Foundation providing the balancing role in the Federal research and development program, (11) a balance between short-term commodity-oriented programs and long-term high-risk work, (12) a continuing evaluation of scientific bases for regulatory work, (13) encouragement of interdisciplinary communication between researchers, (14) wide distribution and utilization of proceedings of research conferences when possible, (15) and invitation of farmers'

238/ Emerson M. Babb. Report on Impacts of Federal Funding Requirements on Marketing Research at State Agricultural Experiment Stations. U.S. Coop. State Res. Serv., Aug. 1976, 124 pp.; Marketing Research at State Agricultural Experiment Stations: Problems and Possible Solutions. Agr. Expt. Sta., Bull. No. 150. Purdue Univ., Jan. 1977, 27 pp.

organizations and consumer groups to meetings of advisory committees. 239/ To fill one of the voids, CSRS was encouraged, in 1976, to establish a regional analysis and coordination office to provide a link with other USDA agencies and State offices. 240/

In the winter of 1976-77, a committee of 11 managers and program planners was established in ARS to study the agency's efforts in post-harvest technology and to determine achievements, program shifts, and justification for ARS to support such work rather than commercial firms. A short report was released in 1978 and an expanded study was continued under the leadership of a staff scientist of the National Planning Staff. During the discussions of research, organization, and coordination in 1976, one economist came to the defense of USDA's marketing research and its contribution. However, he brought up a problem in terminology--some people did not use "marketing research" the same way that the Department used it. Some were using "post-harvest technology" to describe it. 241/

Directors of the Northeast experiment stations created a Research Program Steering Committee on Marketing and Competition in 1977 to develop a master program for marketing and competition research as part of the Regional and National Agricultural Research Planning System. The focus was aggregate economic analysis in the experiment stations rather than Federal research. It developed 12 research areas of highest priority, and was followed by a symposium that also included representatives from consumer and industry groups, to discuss these recommendations. 242/

The ESCOP Marketing Subcommittee conducted a workshop on coordinating marketing research, May 9-11, 1977. Out of this came a recommendation that ARPAC create a special task force of representative scientists and research managers

---

239/ U.S. Congress, House Committee on Science and Technology. Special Oversight Review of Agricultural Research and Development. Aug. 1976, pp. 1-14, 94.

240/ ESCOP Minutes, Oct. 1976.

241/ U.S. Science and Education Administration. "Post-Harvest Technology Research Assessment." Undated. 23 pp.; Anderson. "White (or Slightly Grey) Paper in Defense of 'Agricultural Marketing' Research," Jan. 6, 1977, 14 pp.

242/ Northeast Marketing and Competition Research Program Steering Committee. "Marketing and Competition." Oct. 1978. 68 pp.

involved in marketing research in the experiment stations, ERS, ARS, FS, and FCS. The task force was to study domestic and foreign marketing research to determine among other things: what coordinating, planning, implementation, and evaluation was being accomplished; improved means of coordination between disciplines and among organizations; and means of evaluating the results of agricultural marketing research. A number of papers were presented on the market system, research priorities and needs, and coordination in the various agencies. James Shaffer and Harold Riley struck a warning note when they advised against overemphasizing coordination. Smaller work groups discussed various aspects of coordination. The marketing subcommittee, at the request of attendees, presented recommendations through ESCOP to ARPAC for a special task force on marketing research. 243/

Suggestions for new legislation came with the wave of hearings, reports, and discussions. Among the changes desired was the removal of the requirement that at least 20 percent of Hatch Act funds be used for marketing research. It was felt that coordination should be written into the law. The Agriculture Division of the land-grant college association established a Legislative Coordination Committee on November 17, 1976. ESCOP reacted to the various bills under consideration mainly by testifying at hearings.

A New Look at Research--the Act of 1977

The National Agricultural Research, Extension, and Teaching Policy Act of 1977 was enacted as Title XIV of the Food and Agriculture Act of 1977. USDA was designated as the lead agency for agricultural research. The Secretary was to coordinate all agricultural research, extension, and teaching activities conducted or financed by USDA and by other agencies as much as practicable; take the initiative in coordination of Federal-State agricultural programs; establish review procedures of research projects; establish multidisciplinary research teams on major agricultural research problems; and conduct a continuing inventory of projects to promote coordination. 244/

The Secretary was to establish a Joint Council on Food and Agricultural Sciences composed of representatives from USDA agencies having research and extension responsibilities, the

243/ ESCOP Minutes. Nov. 17, 1977; Proceedings of National Workshop on Coordination of Marketing Research. May 9-11, 1977, 106 pp.; Hugh Ottoson to Marketing Subcommittee of ESCOP, May 26, 1977.

244/ 91 Stat: 981.

Office of Science and Technology Policy, land-grant colleges and universities, State experiment stations, State extension services, other public and private institutions, and individuals interested in the formulation of national policy for food and agriculture. The council was to be jointly chaired by the assistant secretary for research, extension, and teaching and by a person elected from among the non-Federal members of the council. The primary function of the council was the coordination of agricultural research, extension, and teaching.

The Secretary was also to establish a National Agricultural Research and Extension Users Advisory Board. The board had general responsibility for preparing independent advisory opinions on the food and agricultural sciences. For this it was to review policies, plans and goals of programs in USDA, and related ones in other Federal and State agencies, universities, private foundations, and industry. In addition, it was to make annual recommendations to the Secretary on allocations of responsibilities and levels of funding for research and extension programs. 245/

The law also provided for a program of competitive, special, and facilities grants for agricultural research in various institutions. In order to stay within the limit on the amount of funds available for research and extension, Hatch Act and McIntire-Stennis budget requests were reduced by the amount of the grant program, a tactic that was criticized by Congressmen Andrews and Whitten. Similar criticism was made in the 1980 appropriation hearings. 246/ Competitive grants for not more than 5 years were authorized for State agricultural experiment stations, all colleges and universities, Federal agencies, private organizations and corporations, and individuals. Other grants were authorized, not to exceed 5 years, for research to facilitate or expand promising breakthroughs in food and agricultural research, and promote excellence in research, as well as the development of regional research centers or the research partnership between USDA, experiment stations, and agricultural colleges and universities. Annual grants were to support the construction, alteration, or renovation of experiment station buildings and to purchase equipment, supplies, and land. It also provided for additional funding for the 1890 colleges' extension and research work. One of the problems experienced under the grant system was

---

245/ Report of the National Agricultural Research and Extension Users Advisory Board. Oct. 1979, v.p.

246/ U.S. Congress, House Appropriations Committee. Hearings ...Agriculture Appropriations, 1979, Part 7, pp. 533-39, 565; 1980. Part 1, pp. 521-47.

that once work under a grant was terminated, the balance of the funds outstanding had to be returned to the Treasury. 247/

A competitive grants office was established within CSRS to process proposals and oversee the program. It subsequently became part of the new Science and Education Administration (SEA) under Agricultural Research, but was later transferred to Cooperative Research. Procedures were developed that included peer panels for evaluating and processing applications for grants. The emphasis has been given to plant science and, according to Joe Key, who directed the office, this would be broadened to include human requirements for nutrients and factors affecting food preferences. Kenneth Farrell, administrator of ESCS, objected to the lack of representatives of social and behavioral scientists on the panels awarding the grants. Representatives from the land-grant college system objected to this new method of administering research, arguing that it was destructive to the disciplines involved. Other objections came from the American Farm Bureau Federation, the Organization of Professional Employees of the Department of Agriculture (OPEDA), the Professional Scientists Association, the American Chemical Association, and others. ESCOP opposed any increase in funds for competitive grants at the expense of other research programs. Moreover, the House Appropriations Committee expressed its objections in its report on the appropriation bill. During the appropriation hearings in 1980, there was considerable discussion and criticism of the program. The subject was discussed in more detail in the report of the committee's investigative staff. 248/

247/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1977. Part 3, p. 872.

248/ U.S. Department of Agriculture, SEA Competitive Research Grants Office. "Procedures for Reviewing Research Proposals and Awarding Grants," Oct. 1978; Federal Register 43, 59030-59041, Dec. 18, 1978; E. M. Leeper. "Rough Going Forecast for USDA Grants Program," Bio-Science. Vol. 28, No. 4, pp. 289-90, Apr. 1978; Kenneth Farrell to James Neilson, Jan. 23, 1979; U.S. Congress, House Appropriations Committee. Hearings... Agricultural Appropriations, 1980. Part 7, pp. 1-4, 17-31, 335-39, 405-13, 965-70, 974-79, 1022-25; 1981, Part 4, pp. 451-54, 473-76, 797; U.S. Congress, House Appropriations Committee. Report on Agricultural Appropriation Bill, 96th Congress, 1st Sess., No. 96-242, 1980, pp. 34-36.

On October 5, 1977, the Economic Research Service, the Statistical Reporting Service, and the Farmer Cooperative Service were combined in the Economics, Statistics, and Cooperatives Service (ESCS). Deputy administrators were placed in charge of the three parts. Little internal change was made at that time, other than the transfer of the Foreign Development Division to the Assistant Secretary for International Affairs and Commodity Programs. 249/

In 1977, the National Academy of Science prepared its World Food and Nutrition Study (WFNS) recommending that collaboration should be increased. It was charged that there was little working contact between those working in fundamental research in the biological sciences and those in technological research on food and nutrition. The study recommended the appointment of an assistant secretary of agriculture for research and education; increases in funding for traditional research programs and funds for a new program of competitive grants for research on food and nutrition; a Federal matching grants program for non-Federal research facilities and equipment; greater use of private resources by contract and coordination; and simplification of regulations. 250/

At its July 1977 meeting, ARPAC asked its strategy group to assess the study's recommendations. This group set up four subcommittees on nutrition, food production, food marketing, and policies and organizations. They were to review priorities, expected results, effects of planned research, funding sources, the international framework, and recommendations for U.S. action. The subcommittee on policies and organization reported that most of these issues were in line with the aims and objectives of ARPAC client groups. The food marketing subcommittee endorsed the consolidation of research activities under an assistant secretary in USDA and a broadened mission for the U.S. agricultural research establishment. It did not feel that marketing had been given a fair share of attention in the study. ARPAC discussed the reports of the subcommittees at its meeting in November 1977, and generally agreed with the recommendations of the WFNS. Administrator of ESCS Kenneth Farrell discussed the ARPAC response at the

---

249/ Secretary's Memo., No. 1927, Oct. 5, 1977.

250/ National Academy of Science. World Food and Nutrition Study: The Potential Contributions of Research. 1977, pp. 46, 134-40, 148-53.

February 1978 National Industry State Agricultural Research Council (NISARC) meeting, including a statement of the important role of his agency in marketing. 251/

The NSF Board on Agriculture and Renewable Resources (BARR) made its report on "Enhancement of Food Production" for the United States in 1977 as part of the WFNS. It advocated the establishment of a National Agricultural Research Policy Council and suggested that USDA should include research as a distinct mission. The report also recommended that there should be a principal administrator to coordinate all research in the Department with a staff of specialists. CSRS should be strengthened with its mission and role evaluated and reoriented. In addition, orderly review of plans, programs, and budget requests should be instituted at the State level by the state experiment stations, ARS, and ERS. Funding for the agricultural research system should include increased Hatch-type funding and a system of competitive grant programs. Systems for research review and evaluation should be strengthened. Finally, a national study should be made of the changing role of agricultural research in the land-grant colleges and other State higher education systems. 252/

Establishment of the Science and Education Administration

On January 24, 1978, the Science and Education Administration (SEA) was established, integrating the former ARS, CSRS, ES, and the National Agricultural Library into one agency with deputy directors in charge of Extension (ES), Cooperative Research (CR), Federal Research (FR), Technical Information Systems (TIS), Administrative Management and Joint Planning and Evaluation (as provided for in the Agricultural Act of 1977). Assistant directors were in charge of program, management, and teaching (an added responsibility under the act).

251/ Agricultural Research Policy Committee. A Review of the National Academy of Science World Food and Nutrition Study, Aug. 1978, pp. iv-v, 24-28; ARPAC Research Strategy Group. Report of the Subcommittee on Policies and Organization. Oct. 17, 1977; Kenneth Farrell. Comments on the NAS World Food Study, Feb. 16, 1978.

252/ National Academy of Science. "Enhancement of Food Production for the United States," World Food and Nutrition Study. 1977, 36 pp.; M. Rupert Cutler. Progress Report on Research/ Extension/Library/Title XIV Reorganization. Dec. 15, 1977; James Neilson to employees of SEA, and others, Jan. 24, Apr. 18, and June 16, 1978; Remarks of M. Rupert Cutler, May 8, 1978. USDA Press release 1326-78.

The Joint Council for Food and Agricultural Sciences was also established, in accordance with the Food and Agricultural Act of 1977. At its organizational meeting, the council decided to retain many features of the previous programs, including the five ARPAC committees, whose charter had expired in December 1977. One of these was the Committee on Coordinating Marketing Research. A Joint Planning and Evaluation Staff was formed within SEA to provide leadership in coordination and planning for the entire food and agricultural science system. Then in May 1978, SEA called in its State research administrators for a workshop on USDA-State research relations. 253/

Criticism of the research surfaced at the 1979 appropriation hearings. The food industry banded together to defend marketing programs slated for reduction or termination. Jack Ing of the Northwest Agricultural Council spoke of the "rape" of the CSRS. He was critical of the grants that went to private research agencies which then turned to the Government for their basic information. After 2 years, these private agencies would complete a study which was a summary of State and Federal information. Actually, the funds, he charged, were taken from the land-grant universities and given to others. Congressman Andrews accused T. W. Edminister, ARS Administrator, of taking these research funds out of the purview of Congress and "into a backroom where some faceless wonders established the priorities." The administrator defended the competitive grant program as making possible the utilization of a wide variety of scientists scattered through a variety of institutions, broadening the base of expertise. Insofar as marketing research, was concerned, much, but not necessarily all, he said, would be continued by private industry or the States. 254/

253/ Letter of M. Rupert Cutler, Dec. 15, 1977; Letters of the Director of Science and Education, Jan. 24, Mar. 28, Apr. 18, May 11, June 16, 1978; M. Rupert Cutler, "Government Reorganization in Washington: USDA: SEA," Agricultural Engineering. July 1978, pp. 45-46; Ned Bayley to Leon Garoyan, Nov. 15, 1978; ESCOP Minutes. Jan. 1978; Members of the Joint Council and the Users Advisory Board are listed in "Agricultural Libraries Information Notes." Feb. 1979.

254/ U.S. Congress, House Appropriations Committee. Hearings ...Agriculture Appropriations, 1979. Part 8, pp. 522-37, 553-54, 352-53, 403, 416; American Farm Bureau Federation. Newsletter. Feb. 23, 1978; Food Distribution Research Society, Inc. Quarterly Newsletter. June 1978.

The American Farm Bureau Federation cooperated with several trade associations in the preparation of a 15-page statement, "Rescue Marketing Research--USDA," which summarized this area of research and recommended remedial congressional action. It urged the consolidation of marketing programs in a single agency. Those attending the annual meeting of the American Agricultural Economics Association in 1978 were challenged by Assistant Secretary of Agriculture Carol Tucker Foreman to reorient their thinking. She urged them to study the economic impacts of such pressing issues as the factors affecting food choice, consequences of changing technology, impact of food safety regulations, and food assistance. 255/

Congress restored much of the funding for marketing research that SEA had proposed for deletion. Then, in March 1979, selected marketing research functions of the Agricultural Marketing Institute were transferred to the Agricultural Marketing Service. These included the Animal Research, Marketing Operations Research, and the Food Distribution Research Laboratories. The Transportation and Packaging Research Laboratory was transferred through AMS to the Office of Transportation which further added to the problem of research coordination. There the units were consolidated in the Market Research and Development Division; a separate Marketing Research Branch has been organized. 256/

The National Agricultural Research and Extension Users Advisory Board, authorized in the Agricultural Act of 1977, was established on February 16, 1978. Composed of 21 members of diverse interests, it was to have general responsibility for preparing independent advisory opinions on the food and agricultural sciences. 257/ The Joint Council, also authorized in the act of 1977, was established on February 21, 1978. In addition to fostering coordination, it was to provide a forum for interchange of information among represented groups;

255/ Committee to Rescue Marketing Research. "Rescue Marketing Research--USDA." Feb. 1978. 15 pp; Carol Tucker Foreman. "Consumers and Food Policy in North America," American Journal of Agricultural Economics, Vol. 60, Dec. 1978, pp. 176-81

256/ Secretary's Memo., No. 1973, Feb. 16, 1979; Memo of Understanding between Science and Ed. Admin. and Agr. Mktng. Serv., Mar. 9, 1979; Agricultural Marketing Service. "Market Research and Development Division Program." Mar. 1980.

257/ Secretary's Memo., No. 1936, Feb. 16, 1978.

analyze impacts of agricultural research, extension, and teaching; develop an information system on private and federally supported agricultural research, extension, and teaching projects; assist in development of memoranda of understanding; develop and review guidelines for use in awarding competitive grants; and prepare an annual summary of research, extension, and teaching achievements and recommendations for a unified program for the following year. Several employees were detailed from ESCS to the council to provide staff support for planning and evaluation activities. 258/

Late in 1978, the House Committee on Science and Technology held further hearings on agricultural research. It found potential areas of improvement to be: management structure; inadequate coordination and insufficient interaction between basic and applied research; higher quality research; and isolation and removal of research gaps. 259/ However, by this time, the competitive grant system was in operation and industry was interested in taking advantage of this opportunity. Richard Aldrich of the Agricultural Research Institute and the Missouri Experiment Station reported that roughly half of the agricultural research and development work was done by private industry. S. G. Younkin, vice president of Campbell's Soup Company, testified that industry had the physical facilities and the technical capability to conduct contract or grant research for USDA, a resource not yet used extensively. Glenn Pound of the University of Wisconsin commended the regional research efforts, but felt that the right formula had not yet been developed. Also, he felt that USDA and the State experiment stations needed to develop an improved system of peer review. 260/

Review of Marketing Research

Already there were three studies underway of marketing research. On July 12, 1977, the Office of Management and Budget had asked

258/ Secretary's Memo., No. 1938, Feb 21, 1978; Kenneth Farrell to ESCS professional employees, Aug. 22, 1978.

259/ U.S. Congress, House Committee on Science and Technology. Agricultural Research and Development: Special Oversight Hearings. Part 2, 1978, pp. 2-3.

260/ U. S. Congress, House Committee on Science and Technology. Oversight Hearings. 1975, pp. 258-261, 433-37.

USDA to undertake a study of marketing research programs to assure that only that research would be performed which would not otherwise be done by the private sector. The CSRS was to evaluate the research carried on by the States under Federal funds, the Agricultural Research Service was to study PHT research in the Department, and the Industrial Research Institute Research Corporation was to conduct a review from the viewpoint of industry.

The industry assessment was completed first. Its panel had interviewed representatives of industry and trade associations. The consensus was that any reduction in USDA research would not be supported or assumed by private industry. Many believed that the government should conduct the research for new knowledge in support of national objectives and to satisfy government regulations, since industry research emphasized production rather than marketing and frequently industry findings were of a proprietary nature and not available to the public. The report concluded that industry believed that Federal research must provide the technical bridge between university science and practical consumer needs. 261/

CSRS prepared its evaluation of such research in the States and territories, releasing its report in January 1979. Basing its study, in part, on a CRIS printout, it evaluated and analyzed programs. It found that major support was for research on productivity and product quality, but more research was underway on the newer goals of health and safety, energy conservation, environmental protection, and reduction of losses. Consumers were identified as the primary beneficiaries of such research, with producers, processors, and other agribusinesses secondary beneficiaries. It was concluded that the private sector would not finance the research needed to meet societal needs. 262/

The third report done by Agricultural Research of SEA came out in March 1979. This included much of the industry report as well as a report by ESCS on an analysis of the agricultural marketing system. Research in the various areas and centers was summarized by commodity with a view of its importance to

---

261/ Harold S. Ricker and Robert W. Cairns. Industry Assessment of USDA Post-Harvest Technology Research. Aug. 28, 1978, 25 pp. and append.

262/ R. G. Garner and R. A. Dennison. Cooperative Research in Post-Harvest Technology. U.S. Science and Ed. Admin., Jan. 1979, 87 pp.

the consumer, to socio-economic goals, and as support for regulatory agencies within USDA and other departments. AR had played an important role in basic research in technological aspects of marketing research; such should remain in the public domain with Federal or State financial support. Such a complex picture emphasized the importance of coordinating and integrating governmental and industrial research. 263/

The various studies, reports, and hearings had highlighted the complexity of the research picture. The Interdepartmental Committee on Scientific Research and Development had been replaced in 1959 by the Federal Council for Science and Technology and by the Federal Coordinating Council for Science, Engineering, and Technology. The Department has been represented on these, and in 1980, the director of science and education served as Chairman of the Committee on Food and Renewable Resources. He also meets with representatives of other agencies involved in agricultural research. So far, the council has not been especially concerned with food marketing. 264/

As one phase of promoting integration and coordination of research, extension, and education activities, four Ad Hoc Regional Councils were established. There was considerable concern that the Federal establishment was being extended--that the material prepared by the Joint Council was dictatorial rather than suggestive and that too many representatives from Washington were attending the meetings in 1979. The regional councils were not yet fully operational when the appropriation hearings were held in March 1980.

263/ U.S. Science and Education Administration, Agricultural Research. Post-Harvest Technology Research. Mar. 1979, 354 pp.

264/ U.S. Congressional Research Service, Library of Congress. Interagency Coordination of Federal Scientific Research and Development: The Federal Council for Science and Technology. House Committee on Science and Technology, Committee Print, 94th Cong., 2nd Sess., July 1976; Telephone conference with Ralph McCracken, SEA, May 30, 1980; Executive Order 10521, Mar. 26, 1954, 10807, Mar. 13, 1959, 11381, Nov. 8, 1967, 12039, Feb. 24, 1979.

When Pound had spoken in Madison, Wisconsin, in November 1979, he had suggested that the regional research format be abandoned. 265/

Again on July 23, 1979, another attempt was made to strengthen the Department's role in providing policy guidance and coordination in research, extension, and education by reorganization. The Director of Science and Education was to report directly to the Secretary instead of through an assistant secretary. 266/

The organization of SEA was discussed at length in the 1981 appropriations hearings. The Investigative Staff of the House Appropriations Committee had conducted its survey of the agency's activities, checking especially on its role of coordination and leadership to prevent duplication. It found that many of the lines of communication had broken down; recommended that the work of the National Planning Staff be phased out from Washington to the field; that the heads of SEA's component parts (AR, CR, and ES) be designated as administrators and that the organizational titles be restored; that the directors-at-large of the State experiment stations be located at the corresponding SEA-Agricultural Research regional office; and that SEA determine whether there has been sufficient success to warrant the continuation of the competitive grants program. The staff also found considerable doubt at the Federal and State level as to the successful functioning of SEA. Moreover, it described as incongruous USDA's proposal to cut marketing research, especially in view of the fact that there was no indication that industry would assume the slack. Anson Bertrand, director of science and education, answered some of the problems raised in the summary by Congressman Whitten, Chairman of the House Appropriations Committee. The Department had approved the organization plan for SEA, on February 7, 1980, with those in charge of Agricultural Research, Extension Service, Cooperative Research, Technical Information Systems, and Human Nutrition designated as administrators. 267/

265/ Glenn Pound. "The Development of Agricultural Research in the United States," Nov. 14, 1979, p. 29; John G. Stovall to Kenneth Farrell, July 6, 1979; U.S. Congress, House Appropriations Committee. Hearings...Agricultural Appropriations, 1981. Part 4, p. 560.

266/ Secretary's Memo., No. 1993, July 23, 1979.

267/ U.S. Congress, House Appropriations Committee. Hearings ...Agricultural Appropriations, 1981. Part 4, pp. 375-82, 786-906.

Another intimation of interest in marketing research was indicated by then-Deputy Secretary James Williams when he spoke before the American Society of Agricultural Engineers in May 1980:

> "If there is to be any one challenge to agricultural researchers and engineers in this decade, I believe that challenge will be in marketing...I believe that there is yet a basic body of knowledge and scientific know-how to be developed in marketing, and I believe it will be done in this decade." 268/

Finally, on September 2, 1980, a subcommittee of the Committee on Coordinating Marketing Research, that had been originally appointed in 1977, made its report to the Joint Council on Food and Agricultural Science. It divided marketing research into two segments, marketing economics and post-harvest technology. Marketing economics focuses on economic aspects of human behavior--the demands of consumers and the efficiency of the system. Post-harvest technology research is primarily physical, chemical, biological, and mechanical rather than social.

Coordination, according to the committee, was necessary to achieve the greatest benefits from research. The Committee reported that it considered the best system to be a combination of central control at the national level and decentralized control to the State experiment stations. The agenda would be established at the national level and priority order specified. Formula funding should be maintained on an inflationary-indexed basis. Special and competitive grants could be continued to encourage new areas of research. Moreover, it concluded that better coordination and greater returns from research dollars would accrue from formula funding. It suggested that some funds be allocated to individuals to support research. 269/

The national election in November 1980 changed the policy direction of the Department and there were questions about possible redirections of USDA programs.

268/ U.S. Department of Agriculture, Press Release. May 21, 1980.

269/ Olin Forker and others. "A Report of a Subcommittee of the Committee on Coordinating Marketing Research to the Joint Council on Food and Agricultural Science." Sept. 2, 1980, 34 pp. and append.

Representatives of several farm organizations and a number of trade associations met in December 1980 to discuss the status of marketing research in USDA. An Ad Hoc Committee on Marketing and Distribution Research--USDA was established. In turn, this appointed a committee to draft a report of the consensus of the group. The report was presented to the Assistant Secretary for Marketing and Transportation Research, William McMillan, on March 25, 1981.

The committee concluded that marketing and distribution research should be consolidated in one agency. It urged that domestic and overseas field stations and laboratories involved in marketing and distribution research in SEA/AR be transferred to the new organization. It cited the August 1980 report of the Joint Council on Food and Agriculture that stressed the need to increase marketing research. In addition it called attention to reports of the National Agricultural Research and Extension Users Advisory Board that recommended that SEA/AR redirect some of its production research to improve efficiency in the post-harvest area and that State experiment stations redirect current production work to decreasing post-harvest costs and losses.

The committee strongly affirmed the continuing and constant role of the public sector in marketing and distribution research. It reported that industry realized its dependence upon the public sector for research. Problems researched by industry were often short range and of concern to a small segment. It saw an important role for the Federal government, the State experiment stations, and State governments.

As a solution to the situation, the group recommended the establishment of a marketing and distribution research service, reporting to the Assistant Secretary for Marketing and Transportation. This would include all USDA marketing and transportation research in Washington and the field, including laboratories and field stations, some of which had been in SEA/AR. Since its scope would be both domestic and foreign, it would cooperate closely with other USDA agencies, land-grant colleges, and State departments of agriculture. 270/

270/ Ad Hoc Committee on Marketing and Distribution Research. "Report." April 2, 1981, 19 pp.

Secretary of Agriculture John R. Block announced a number of organizational changes on June 17, 1981. Among these was the abolition of ESS. The Economic Research Service and the Statistical Reporting Service were reestablished as separate agencies reporting to the assistant secretary for economics. The Science and Education Administration was abolished and its constituent parts became separate agencies reporting to the director of science and education. These resumed their titles: Agricultural Research Service, Extension Service, Cooperative State Research Service, and National Agricultural Library. 271/

CONCLUSION

This survey of efforts to coordinate agricultural research over the years shows that there is no single, effective way to meet the objective. Further, it is not at all clear that close coordination has at any time led to more effective research. Coordinating mechanisms developed to meet particular situations at particular times have been as effective as more elaborate coordinating programs.

The coordination of marketing research has, in general, followed the same patterns as the coordination of all agricultural research. However, marketing research has had its ups and downs, and at times there has been comparatively little to coordinate. The high point in marketing research came in the years immediately after the passage of the Research and Marketing Act of 1946.

The Food and Agriculture Act of 1977 rearranged research priorities and brought more elaborate mechanisms into being for research coordination. The effectiveness of these mechanisms is still to be determined. However, judging from past experiences, these mechanisms will, in their turn, be modified and adjusted over the next few years in the continuing attempt to solve specific problems of research coordination.

271/ U.S. Department of Agriculture, Press Release 765-81, June 17, 1981.

GLOSSARY OF ABBREVIATIONS

AMA	Agricultural Marketing Administration
AMS	Agricultural Marketing Service
ARA	Agricultural Research Administration
ARI	Agricultural Research Institute
ARPAC	Agricultural Research Policy Advisory Committee
ARPC	Agricultural Research Policy Committee
ARS	Agricultural Research Service
BAE	Bureau of Agricultural Economics
BARR	Board of Agriculture and Renewable Resources
CARIS	Current Agricultural Research Information System
CRIS	Current Research Information System
CSESS	Cooperative State Experiment Station Service
CSRS	Cooperative State Research Service
ERS	Economic Research Service
ESCOP	Experiment Station Committee on Organization and Policy
ESCS	Economics, Statistics, and Cooperatives Service
ESMRAC	Experiment Stations Marketing Research Advisory Committee
FCS	Farmer Cooperative Service
FDA	Food and Drug Administration
FS	Forest Service
GAO	General Accounting Office
HEW	Health, Education and Welfare, Department of
MAPS	Management and Planning Systems
NARAC	National Agricultural Research Advisory Committee
NASA	National Aeronautics and Space Administration

*U.S. GOVERNMENT PRINTING OFFICE: 1981-0-340-932/ESS-160

NIH	National Institutes of Health
NISARC	National Industry-State Agricultural Research Council
NRC	National Research Council
NSF	National Science Foundation
OES	Office of Experiment Stations
PMA	Production and Marketing Administration
RMA	Research and Marketing Act
SCS	Soil Conservation Service
SEA	Science and Education Administration
TIS	Technical Information Systems
SAES	State Agricultural Experiment Stations
USDA	United States Department of Agriculture
WFNS	World Food and Nutrition Study