PRODUCER RESPONSES TO AND ATTITUDES TOWARD FEDERAL PRICE SUPPORT PROGRAMS FOR POTATOES

By

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A THESIS

Submitted to the School of Graduate Studies of Michigan State College of Agriculture and Applied Science in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

Department of Agricultural Economics

1953

ACKNOWLEDGEMENTS

Grateful appreciation is expressed to all those who assisted in the development of this study and the preparation of the manuscript. The author is particularly indebted to Dr. Dale E. Hathaway, who gave freely of his time in counsel during the analysis of the data, and to Dr. M. E. Cravens, who guided the study during the collection of the data. Their suggestions and assistance are deeply appreciated.

The author desires to thank especially the 250 farmers who patiently gave of their time in order to make study possible. He is also indebted to the enumerators--Arthur P. Bergman, James C. Finn, Nelson L. Roane, and Dale H. Stangland--each of whom spent a week in taking interviews.

Thanks are due Mrs. Arlene King and the girls under her supervision who assisted with the coding, computing, and typing.

Sincere gratitude is expressed to Dr. T. K. Cowden, Head of the Agricultural Economics Department and Chairman of the author's guidance committee, for his permission to conduct the study and for his continuous encouragement and inspiration.

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Doctor of Philosophy

Final examination, May 21, 1953, 8:00 A.M., Office of Dr. T. K. Cowden

Dissertation: Producer Responses to and Attitudes Toward Federal Price Support Programs for Potatoes

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AN ABSTRACT

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State College of Agriculture and Applied Science
in partial fulfillment of the requirements
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Approved 

The federal price support program for potatoes evolved from one designed to expand production during World War II to one burdened with excessive supplies after the end of hostilities. To reduce the cost of the price-supporting obligations, availability of price support was conditioned on compliance with acreage allotments and on the use of marketing orders. As these endeavors failed to balance supply with market requirements, Congress required the growers' approval of another program--marketing quotas. Growers never were given the opportunity to vote on quotas.

The objectives of this study were to determine farmers' responses to the programs of support and their attitudes toward them. As a basis for analysis, 250 farmers were selected at random from Production and Marketing Administration lists of commercial potato producers in 15 counties for the year 1950. These growers were interviewed during the spring of 1952 and a questionnaire was sent to the same growers in January and February of 1953.

The program of guaranteed price apparently encouraged farmers to improve their production practices. Following removal of supports, farmers apparently did not continue to improve their production practices at the former rate. Although most of the growers had complied with their acreage allotments in 1950, compliance was said to have been a coincidence rather than a deliberate change of plans. The greater the distance from the terminal markets, the greater was the compliance with allotments and sale of potatoes to the government. A large majority of the livestock farmers made use of the 1950 program; however, few whose yields were fewer than 200 bushels used it.

The potato growers seemingly were aware of the relationships between the programs that were discussed with them. There was a tendency for the producers who were in favor of the federal programs to accept them in their entirety, and for those who were opposed to them—and these were the majority—to reject them completely. Their attitudes were strongly influenced by whether or not they gained as a result of the program. The most important factor contributing to this personal gain was the location of the grower. As the distance from the terminal markets increased, the greater was the approval of the federal programs.

Approximately 60 per cent of the interviewees thought the 1950 potato support plan was a bad thing because it resulted in lowered farm prices by causing overproduction. Thirty per cent favored it because they appreciated forward prices since the latter involved no risk or gamble. The remainder had no opinion.

Farmers were concerned not with the costs and wastes of the program but with the administrative aspects. Acreage allotments were considered to have been fair but not workable.

Farmers were opposed to the operation of the marketing order because they were against governmental interference. Over one-half of the growers had no understanding of marketing quotas and this proportion was greater in the Upper Peninsula.

The growers did not desire price support for the 1953 crop and there was no relationship between the desire for support and the price expected. Since controls were considered necessary for supports, acreage allotments were recommended. Farmers favored the direct-payment method of support, such payments not to exceed a given maximum to any one person, and a state tax to be used for promotional purposes.

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INTRODUCTION

Probably never have the producers of a major food crop in the United States experienced so much public criticism and misunderstanding as potato growers did in the crop years from 1946 through 1951. The public felt that unduly large amounts of money were being wasted on the potato price support program. The net loss to the government for support operations of the potato crops from 1946 through 1950 was slightly more than one-half billion dollars.[1] Surpluses ended with the removal of supports on the 1951 crop. However, acute shortage resulted: potatoes were dear, there were lurid tales of black market deals.

The entire price support program for agriculture was in danger because of attacks by the press and the general public on the potato program. Consumers, viewing pictures of the destruction of potatoes, became quite indignant about the payment of higher prices for their potatoes at the market and higher taxes to provide support funds.

Congress also succumbed to the vicious propaganda attacking the potato program. Since the support program had proven expensive and unpopular, potatoes, beginning with the 1951 crop, could not be supported

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[1] United States Department of Agriculture, Production and Marketing Administration, Fruit and Vegetable Branch, Potato Division. (Mimeograph Report). July 12, 1951.

by the federal government. For this agricultural commodity only has Congress specifically refused to provide the means for price support.

In 1950 the leaders of the three major farm organizations (American Farm Bureau Federation, National Grange, and Farmers' Union) continued to press for a price guarantee for potatoes. The American Farm Bureau was the most specific in its recommendation "that potatoes have a 60 per cent of parity price support program" and "that the use of marketing agreements by producers be required as a condition of eligibility for price support."[2] The legislative committee of the National Potato Council, an organization created in May, 1948, which claimed to represent most of the commerical Irish potato production in the United States, lobbied very diligently for the continuation of potato price supports.

The Florida Potato Council, the Pennsylvania Cooperative Potato Growers, Inc., and the Texas Citrus and Vegetable Growers and Shippers urged the elimination of the potato price support. They stated that the following were disadvantages of the price support: the dangers arising from placing potato growers in complete subservience to the federal government; the surplus problem had become worse instead of better under the program; the support program had caused unfavorable publicity toward the potato industry, and the wasteful disposal of the resulting surplus

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[2] United States Congress. Marketing Quotas for Irish Potatoes. Hearings before a Subcommittee of the Committee on Agriculture and Forestry, United States Senate, Pursuant to S. 2634 and S. 3049, 81st Congress, 2nd Session, March 15, 16, 17, 20, and 21, 1950. Washington: Government Printing Office, 1950, p. 199.

of the support program had created consumer resistance to the use of potatoes.[3]

We find sharp differences, therefore, in the attitudes of various organizations representing the potato growers of the United States towards the potato price support program.

While the federal government had carried on surplus removal programs for potatoes since 1934, the price supporting activities became mandatory for the 1943 crop of Irish potatoes at 90 per cent of parity under the Steagall Amendment. This program continued until the end of the 1948 crop year. Under the Agricultural Act of 1948 and further in the Agricultural Act of 1949, price support was mandatory for potatoes at a level of 60 to 90 per cent of parity. Pursuant to this legislation the Department of Agriculture carried out a price support for potatoes at a level of 60 per cent of parity on the 1949 and 1950 crops.

It wasn't until 1946 that the production of potatoes created very serious surplus problems. The Commodity Credit Corporation was obliged to purchase just over 108,000,000 bushels from that crop.[4]

Acreage allotments were begun with the 1947 crop as an attempt to exercise some degree of control over production. While acreage was reduced, yields continued to rise to such an extent that a surplus of potatoes persisted.

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[3] Ibid., pp. 183-199.

[4] United States Department of Agriculture, Production and Marketing Administration, Fruit and Vegetable Branch, Potato Division. Op. cit.

Because of the excessive cost to the government for the purchase of surplus potatoes, Congress, in 1950, made the adoption of marketing orders mandatory if producers in certain areas were to realize the advantage of price supports. Even under marketing orders, the surplus purchases from the 1950 crop were large and costly. As a prerequisite for price supports for the 1951 and subsequent crops, Congress demanded the approval of potato growers to still another federal program, i.e. marketing quotas. Thus, in return for the price guarantee on their product, potato growers were confronted with increasing production and marketing controls.

The support program ended with the 1950 potato crop as Congress conveniently failed to extend the provisions of marketing quotas to include potatoes. Currently, marketing quotas may be applied only to basic crops.

Purpose of the Study

The purpose of this study is (1) to determine the participation and response of commercial potato producers in Michigan to the price support program; (2) to determine and analyze the attitudes of commercial potato producers in Michigan towards the federal programs - price support, marketing orders, and marketing quotas - relating to this industry; and (3) to determine whether or not there is any association between the characteristics and practices of the grower and his participation in and attitudes toward the federal programs.

It is hoped that the information secured in this study will be of use in the development of public policy relating to agriculture and

especially to the potato industry. Furthermore, this study might be included as an additional segment of research in public policy being conducted by the Department of Agricultural Economics at Michigan State College. An earlier project included a survey taken in the summer of 1950. The sample in this study included 500 commercial farmers in seven counties, and an additional 72 potato growers in one county. The objectives were to determine farmers' action under the support programs and their attitudes toward them.

It is anticipated that this study, which was conducted only among the producers of a single commodity, will be educational. The findings of this survey may be used to inform administrators, organizational leaders, consumers, and other groups concerning what potato farmers actually thought about these controversial programs. In addition, the results of present and proposed federal legislation applicable to the potato industry may be compared with the attitudes of the potato producers. It is further expected that the information gained from this study will be of value in the development of better public policy relating to agriculture and particularly to the potato industry.

CHAPTER II

HISTORICAL BACKGROUND

Review of Literature

Undoubtedly the most extensive project in determining farmers' opinion and attitudes toward agricultural programs was conducted by the United States Department of Agriculture in 1951. The study, known as the "Family Farm Policy Review", was conducted in practically all the counties of the nation. There were more than 7,000 meetings and the total attendance was more than 200,000.[1] The objective of the Review was to find out how well the programs of the United States Department of Agriculture were serving family farmers and how these programs could be improved to protect and preserve the traditional American pattern of family farming.[2]

The American Farm Bureau Federation refused to cooperate with the Department of Agriculture in this study because its leaders charged that the entire project was political in nature. Furthermore, the Farm Bureau leaders felt that it was their duty to make recommendations for the farmers and not that of government employees. The National Grange, the National Farmers Union, and the National Council of Farmer Cooperatives were represented on the Review's Subcommittee.

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[1] Summary of the Family Farm Policy Review, United States Department of Agriculture, September, 1952, p. 3.

[2] Ibid., p. 1.

Many subjects were considered at these meetings. However, there was specific approval of the price support program. "A heavy preponderance of opinion" was reported to favor 100 per cent of parity supports. There was a fairly even division of opinion as to the crops which would receive the high level of support - basic commodities, an expanded list of crops, and commodities essential for defense.[3]

The summary mentioned that:

> There was some advocacy of 90-percent support and scattered proposals for lower rates, with a relatively small minority for withdrawal of all supports. Some negative opinion appeared on the policy of direct payments..... Opinion was divided as to whether maximum payments should be set.
>
> The group favoring quotas only for basic crops was roughly matched by a group of counties favoring quotas for perishable crops. Another group of county reports opposed quotas for perishable and still another group approved quotas for nonbasic storable commodities. More counties favored quotas based on quantities than favored quotas based on acreage.[4]

These results would indicate that farmers of the United States favor price support of 100 per cent of parity on the basic crops and selected additional crops. The summary implied that the majority of farmers favored more government programs and control. There was apparent in the report a strong sentiment supporting most of the programs of the Production and Marketing Administration.

In the state of New York, a study was developed in connection with the Family Farm Policy Review. Leaders in that state questioned the value

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[3] Ibid., p. 12.

[4] Ibid., p. 13.

of following the suggestion of county meetings as the other states had done. They felt that the attendance at the meetings would not represent a cross-section of the farmers. With the objective "to find what farmers think about farm policies and programs", county agricultural agents and teachers of vocational agriculture interviewed 1,500 New York farmers in the summer of 1951. Only farmers obtaining one-half or more of their income from the operation of a farm were included in the sample which represented the state as a whole and not individual counties. More farmers were interviewed in the large agricultural counties than in the counties with fewer farmers.[5]

It was found that New York farmers were about evenly divided on the issue of price support. Forty-five per cent of all the farmers felt price should be supported, 46 per cent opposed the idea, and nine per cent were undecided. Older persons and those with more education were less likely to favor the support principle. Fifty per cent of the potato growers, 45 per cent of the dairy farmers, and 30 per cent of both the poultry and livestock farmers approved price supports.[6]

Of the 669 farmers favoring supports, a few more than one-half favored flexible supports. Furthermore, these farmers tended to favor methods of support in which the farmers participated and which involved them directly with representatives of the Production and Marketing

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[5] Edward O. Moe, New York Farmers' Opinions on Agricultural Programs, Cornell University Extension Bulletin 864, Ithaca, New York, 1952, p. 56.

[6] Ibid., pp. 32-34.

Administration[7]. Ninety per cent of parity was the level of support desired by slightly more than one-half of the 172 farmers favoring a fixed level support rather than the flexible. Of these 172 growers, 87.2 per cent favored support at 90 per cent of parity or higher.[8]

About six out of ten potato farmers favored export subsidies and five out of ten favored income payments. As only a third of the entire sample of farmers favored income payments and also export subsidies, it was explained that potato prices were low at the time of the survey, which might explain the greater degree of approval among potato farmers. Three out of ten farmers favored production controls as compared with a slightly higher proportion of vegetable farmers (5 out of 10) and potato and cash-grain farmers (4 out of 10).[9]

Apparently the farmers in New York have different attitudes toward the government and its program than do the farmers of the United States as a whole, as reported in the Family Farm Policy Review. Potato farmers in New York State expressed a slightly greater approval of price supports and various control programs than did the average farmer.

In 1950, Michigan State College conducted a survey, the objectives of which were the measurement of farmers' actions under the support programs and their attitudes toward them. Their sample consisted of 500 farmers selected in seven counties and 72 potato farmers chosen from one

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7 Hereafter referred to as P.M.A.

8 Op. cit., pp. 34-35.

9 Op. cit., pp. 36-38.

county. These farmers were selected to represent the major farming areas in which crops (corn, wheat, oats, bean, and potatoes) covered by price supports were produced. The interviewing was done in the summer of 1950. Only farmers who operated farms of 70 acres or more were interviewed. Project leaders assumed that price support programs benefited commercial farmers primarily as the chief objective of the program was higher prices. Since the productivity of the operators of small acreages was so low, the program did not appear to improve the income of this type of farmer.

In an attempt to clarify some situations, lengthy statements were read to the farmers and then short questions were asked. This type of interview might be questioned as it would be hard for any person to comprehend the full meaning of lengthy statements which are read to him even if they are repeated several times. Furthermore, some might believe that the situations as read and the questions developed therefrom would result in very biased answers.

It was found that only 25 per cent of all farmers and 37 per cent of the potato farmers used a support program in 1949. Approximately 40 per cent of the potato producers stated that there was no price advantage to them in using supports. In addition, nearly 20 per cent of the potato growers did not sell potatoes to the government because they were against the support program. The main reason given by 89 per cent of those using the potato program was the price advantage that it gave. While the farmers with large quantities of wheat to sell used the program to a greater extent, there was no such association found for

potatoes.[10] Although 68 per cent of the potato farmers complied with acreage allotments in 1950, only 29 per cent said they intended to use the price support that year. The decline in the intended use of the program from 1949 was suggested to be due to the fact that potato prices had been favorable relative to support price during the previous year.[11]

All the potato farmers stated that they had received acreage allotments. Of those who failed to comply, one-half felt that compliance would interfere with rotations or would require the splitting of a field. Over half of the potato growers who complied replied that compliance was only a coincidence.[12]

Another segment of the project sought to analyze the factors that affected farmers' participation in the federal price support program. The factors considered were: price differential between the market price and the support price, type of farm, size of farm, tenure, age, indebtedness, political party, membership in farm organization, farming experiences, and education of the operator. Only prices, size of farm, and type of farm appeared to have any influence upon participation in the price support program.[13] However, there is no indication of the actual

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[10] Dale E. Hathaway, and E. E. Peterson, Michigan Farmers and the Price Support Program. I. Farming Under Price Supports, Michigan Agricultural Experiment Station, East Lansing, Michigan, Technical Bulletin 234, December, 1952, pp. 9-13.

[11] Ibid., pp. 14 and 18.

[12] Ibid., pp. 19-20.

[13] Darwin G. Kettering, Participation in the Federal Price Support Program by Michigan Farmers, Unpublished M.S. thesis, Michigan State College, 1951, p. 92.

degree of significance used in the reporting of the results in this phase of the project.

As for price, the further the support price was above the market price the more the producer used the program. In the case of farm size, the larger the farm the more likely the price support program would be used. In the case of type of farm, there was significance reported for farms over 200 acres in size. The crop farmers used the program considerably more than the livestock and general farmers.[14]

Hathaway and others found that Michigan farmers were about evenly divided in their belief of the need for price supports. However, these farmers were rather inconsistent as two-thirds of the farmers agreed that there should be a floor under farm prices. Furthermore, approximately twice as many farmers said support should be at 90 per cent of parity or higher as were opposed to supports or felt that they should be below 90 per cent of parity. Hathaway writes that, "More farmers said 90 per cent of parity was too low than said that supports should be flexible... Farmers who understood the parity-support relationship were less in favor of high supports and more in favor of flexible supports."[15]

In the Michigan study there was no association found between the farmers' attitudes toward supports and the following factors: size of farm, farm ownership, age, indebtedness, farming experience, membership

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[14] Ibid., pp. 92-93.

[15] Dale E. Hathaway, Farmers' Knowledge, Attitudes, and Agricultural Policy, Unpublished Ph.D. thesis, Harvard University, 1951, pp. 191-193.

in farm organization, or years of formal education.[16] Michigan farmers were opposed to production controls and more than two-thirds did not know the meaning of marketing quotas. Of those farmers indicating a knowledge of marketing quotas only 20 per cent favored them.[17]

As to the support method for perishables desired by the Michigan farmers, a small degree of preference was shown for the diversion program. However, potato farmers, who as a group had experience with the diversion type of program, favored direct payments by nearly a two-to-one vote. It was suggested that farmers were not so much concerned with the method of support as they were with the economic implication of the program. The producers appeared to be more interested in the cost of the program, the waste of food products, and the relationship to the marketing organization.[18]

The authors of the Michigan Technical Bulletin 235 implied that if farmers had more experience and knowledge of direct payments they would favor this type of support. It is just as likely to assume that if farmers had had experience with direct payments and none with diversion programs, they might have preferred diversion methods.

The results of the New York and Michigan surveys were somewhat similar regarding the opinions of farmers toward production and marketing

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16 Dale E. Hathaway, Michigan Farmers and the Price Support Program. II. Farmers' Attitudes Toward the Support Program. Michigan Agricultural Experiment Station, Technical Bulletin 235, 1952, p. 12.

17 Dale E. Hathaway, op. cit., pp. 193-194.

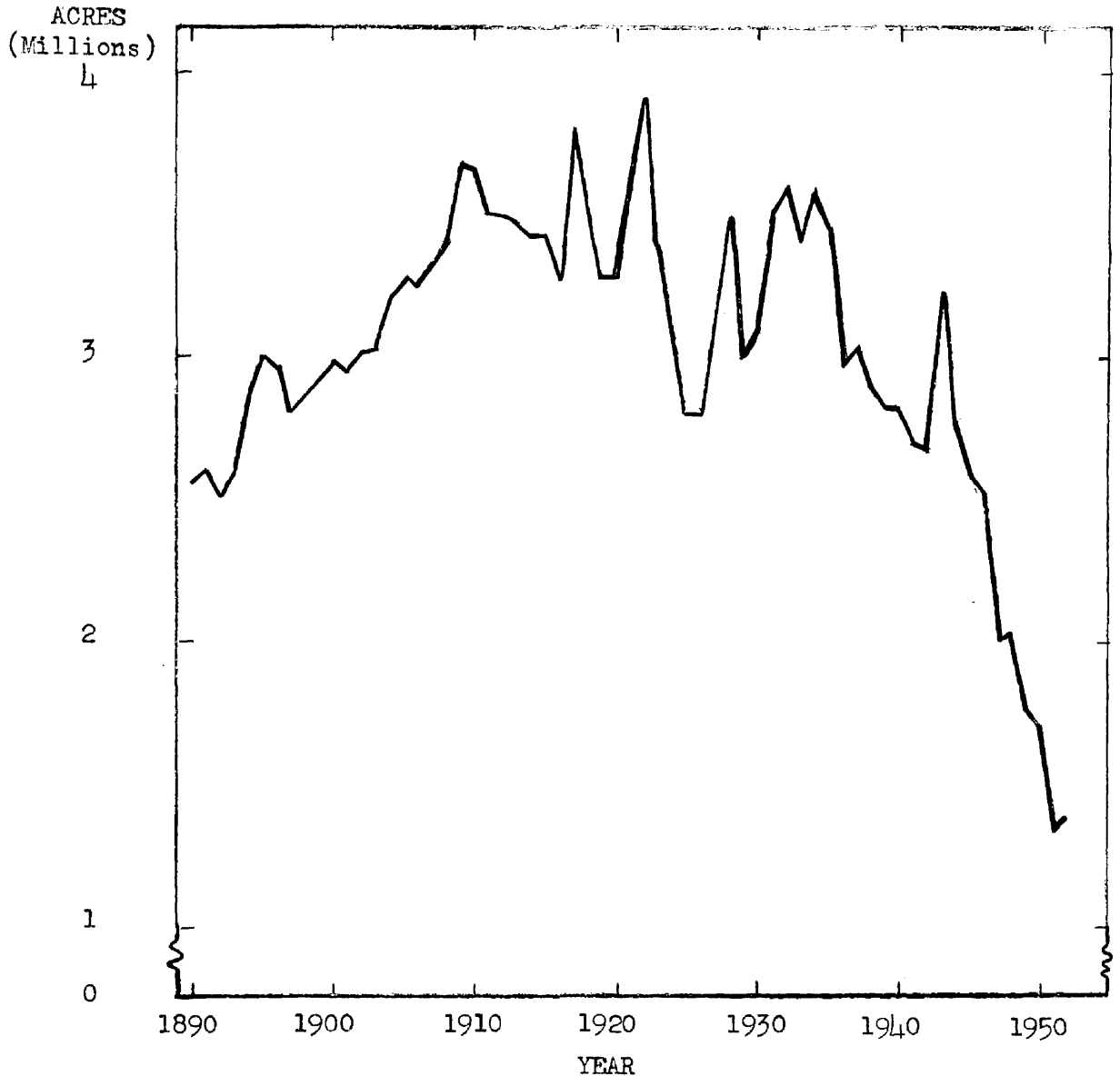
18 Dale E. Hathaway, and Lawrence W. Witt, "Agricultural Policies: Whose Valuations?", Journal of Farm Economics, Vol. 34: (August, 1952) 305-307.

quotas and the need for supports. However, the views of the Michigan producers were more in agreement with the Family Farm Policy Review regarding the level of support, since both reports indicated an approval of the high level of support. The New York farmers who favored price supports desired a flexible level of support.

Congressional Decisions Relating to Potatoes

The steady decline in the potato acreage harvested in the United States (from 3,599,200 acres in 1934 to 2,692,000,000 acres in 1941, the lowest since 1893, Figure I), began to worry Congress and the Department of Agriculture in 1941. They remembered the days of World War I when there were shortages of potatoes and demonstrations on the part of housewives because of it. Because of these events it was thought necessary to adopt a program which would assure adequate production of potatoes in order to meet both military and civilian requirements at the beginning of World War II.

A program to support the market price of potatoes was in effect on the 1942 crop. This plan did not propose to expand production but rather to stimulate normal production. The Government assured a support price of 75 per cent of parity to those growers who planted at least 80 per cent but not over 110 per cent of their agreage allotment. Funds to maintain the price for this program came from Section 32 funds (Sec. 32 of Public Law No. 320, 74th Congress - Agricultural Adjustment Act of 1935). This legislation provided that 30 per cent of the gross receipts from duties collected under the custom laws would be used to widen the market outlet for farm commodities. The Department of Agriculture was



Source: Data for 1890-1929 from Agricultural Statistics, 1941, p. 256; 1930-1943, Agricultural Statistics, 1948, p.261; 1944-1949, Revised Estimates, 1944-49, Statistical Bulletin No. 108, Crop Reporting Board, U.S.Department of Agriculture; 1950-1952, Annual Summary, Acreage, Yield, and Production of Principal Crops of 1951 and 1952.

Figure I. Harvested Acreage of Potatoes, United States, 1890-1952

authorized to use these funds to divert surplus agricultural commodities to useful outlets both in the United States and in foreign countries.

In November, 1942, the Secretary of Agriculture, Claude Wickard, formally declared that an expansion of potato production was needed. This action automatically placed potatoes in the category of so-called Steagall commodities. The Steagall Amendment was passed in 1941 as a measure to assure adequate food supplies during the war. The Secretary of Agriculture was required to support the price of any farm commodity for which he made a formal request for increased production for the war effort. The Steagall Amendment originally specified a minimum price guarantee of 85 per cent of parity and support was to continue until producers had sufficient time to readjust production of the commodity.

The Stabilization Act of 1942, however, raised the minimum support level to 90 per cent of parity and also carried the provision that support must be maintained for at least two years after hostilities were ended. The potato crops of 1943, 1944, and 1945, which were supported at 90 per cent of parity, did not burden the government with surpluses.

In 1946 the Department of Agriculture dumped one-third of the 108,000,000 bushels which it purchased in order to support the price at 90 per cent of parity. It was during these dumping operations that the American press aroused the wrath of the public against the potato support program. This was done mainly through the use of pictures of surplus purchased potatoes being destroyed with kerosene.

During the summer of 1947 a subcommittee of the Agricultural Committee of the House of Representatives conducted an investigation into the handling of the potato program. The committee in its report recommended that all possible steps be taken to avoid the destruction of

potatoes. The Department regarded this action as a mandate to save potatoes regardless of cost.

The 1947 surplus was moderate but in 1948 the surplus reached an all-time record of 133 million bushels. The total cost of the 1948 program was about $225,000,000 of which approximately $55,000,000 resulted from the extra handling costs encountered at the local shipping point and the transportation costs met in shipping the potatoes to some useful outlet. Many of the outlets, e.g. alcohol, utilized potatoes despite the fact that it was not economical.

As the support provisions of the Steagall Amendment, as amended by the Stabilization Act of 1942, expired December 31, 1948 (two years after the declaration of the end of war, December 31, 1946), Congress provided in the Agricultural Act of 1948 for continuation of support at the 90 per cent of parity level for potatoes harvested before January 1, 1949.

The Agricultural Act of 1948 provided for supports for potatoes in 1949 under Title I and for supports in 1950 and subsequent years in Title II. Title II never became effective because its provisions were amended by the Agricultural Act of 1949 which became law October 31, 1949. Title I provided for the continuation of support in 1949 for those commodities for which the Secretary of Agriculture had requested an expansion of production (so-called Steagall commodities). The support level was to be not less than 60 per cent of parity or more than the level at which the commodity was supported in 1948. As potatoes were supported at the 90 per cent of parity level in 1948, the support level, therefore, was to be between 60 and 90 per cent of parity in 1949. The Secretary of Agriculture

was given the authority to establish the level of support for potatoes and, in addition, was given the authority to require compliance with production goals and marketing regulations as a condition for support. Prices of potatoes could be supported through loans, purchases, payments, and other operations.

Another important provision of the Agricultural Act of 1948, which affected potatoes, changed the method of calculating parity. The parity price of an individual farm commodity, such as potatoes, is a standard for measuring the purchasing power of that commodity in relation to price of goods and services during a definite base period. The method of calculating parity prices with the new formula for potatoes was effective in 1950 and was as follows:[19]

(1) Seasonal average prices received by farmers for 10 preceding years are calculated. For 1950, this was the 1940-49 average.

(2) The 10-year average was divided by the 120-month average of the index of prices received by farmers (January 1910-December 1914 equals 100) for the 10 calendar years, to give an "adjusted base price."

(3) Parity prices are calculated by multiplying the "adjusted base period" prices by the index of prices paid by farmers, including taxes and wage rates (1910-14 equals 100). The Agricultural Act of 1949 amended the parity formula to include a weight for the wages paid to hired farm labor.

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[19] Price Programs of the United States Department of Agriculture, Agriculture Information Bulletin No. 13, U.S.D.A., P.M.A., April, 1950, p. 49.

In order to prevent the effective parity price from dropping too quickly, Congress provided for a gradual adjustment each year. The effective parity price of potatoes could not be less than the following percentages of the old parity: 1950, 95 per cent of old parity price; 1951, 90 per cent; 1952, 85 per cent; and 1953, 80 per cent. The complete transition to the new parity for potatoes was made by January 15, 1953.

On January 15, 1952, the old parity for potatoes would have been $2.04 per bushel, the new parity would have been $1.64 per bushel, but the effective or transitional parity was $1.73 (85 per cent of the old parity).[20] Thus the change in methods of determining parity resulted in a difference of $.40 per bushel between the old and new parities.

In announcing the general price support plan for the 1949 crop, Secretary Brannan stated that, "I have been extremely reluctant to approve the lowering of the support price for potatoes to 60 per cent of parity. Controlling excess production by dropping price supports sharply is not a desirable way to get adjustments, no matter how necessary these adjustments may be."[21]

Another new provision of the 1949 announcement was the fact that the support price was applicable to all potatoes of U.S. No. 2 grade, 1-7/8" minimum diameter or better. In previous years discounts were applied to potatoes grading lower than U.S. No. 1. The purpose of the

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[20] United States Senate, Parity Handbook, 82nd Congress, 2nd Session, Document No. 129, Washington: Government Printing Office: 1952, p. 5.

[21] United States Senate, Repeal of Mandatory Egg and Potato Price-Support Programs, (Hearings before a Subcommittee on Agriculture and Forestry), 81st Congress, 1st Session, Washington: Government Printing Office, 1949, p. 5.

uniform rate was to encourage the commercial marketing of the better grade potatoes and cause the lower grades to enter the price support program.

The Agricultural Act of 1949 continued the mandatory 60 to 90 per cent parity support for potatoes. In addition it stipulated that support operations could not be carried on through direct payments. The major provisions (Section 411) in this Act which might later plague potato growers was the amendment to Section 32 of the Agricultural Adjustment Act. Legislation now provides that the sums (30 per cent of the customs receipts) appropriated under Section 32 shall be devoted principally to perishable, nonbasic agricultural commodities other than those designated in Title II, which does contain potatoes. Thus potatoes, which were later denied a price guarantee but not removed from Title II, cannot receive aid from funds derived from Section 32.

The elimination of Section 32 funds for potatoes created a problem for the administrators of the price support program. In previous years, large volumes of potatoes had moved into human consumption through schools and non-profit welfare institutions. The commodity cost and the charges for handling and transportation were paid from Section 32 funds.

The Agricultural Act of 1949 (Section 416) provided for the donation of commodities such as potatoes to school lunch and welfare outlets but they had to be donated f.o.b. shipping point. Another provision in the Act allowed for distribution for livestock feed of commodities which were threatened with loss through spoilage, without restriction on the payment of transportation or handling charges. Therefore, the Department of Agriculture was allowed to pay transportation costs on potatoes going for

livestock feed but it was forced to assess such charges on potatoes to be used for human food.

This situation was later cleared in an amendment to the Emergency Cotton Quota Adjustment Act (Public Law 471 - 81st Congress). The Secretary of Agriculture was given authority to pay transportation and handling charges on potatoes given to eligible recipients. This was done so that more potatoes could be directed to human consumption rather than be destroyed.

Marketing agreement and order programs can be established for potatoes under the authority of the Agricultural Marketing Agreement Act of 1937. A marketing agreement is a voluntary contract between the handler of potatoes and the Secretary of Agriculture and affects only the handlers who sign it. A marketing order issued by the Secretary of Agriculture is limiting to the potato handlers whether they have signed it or not. The order may not be issued unless two-thirds of the producers voting in a referendum give their approval. If all handlers voluntarily signed an agreement, there would be no need for an order.

The sale of Michigan potatoes from the 1947 through the 1950 crops was regulated under provisions of Federal Marketing Order No. 60. In 1950, regulations under the order, popularly known as the "North Central Potato Order", governed the marketing of potatoes in the states of North Dakota, Minnesota, Wisconsin, Michigan, and parts of Iowa and Indiana. No marketing agreement applied in this area. There was no need for an agreement with the order as all handlers had to abide by the regulations or be liable to legal action taken by the Department of Justice.

Legally such marketing agreement and order programs are developed as exemptions to the provisions of the anti-trust laws. However, no action may be taken under these programs which would maintain prices above the parity level. When the parity level of potatoes was lowered, the extent of the use of these federal marketing programs was reduced.

Every potato marketing order program provides for a committee of growers and handlers to administer its terms. Members of the committee are generally nominated by growers and handlers in the industry and appointed by the Secretary of Agriculture. The expenses of the committee are collected as assessments against the handlers. One of the main purposes of the marketing order programs, in regard to potatoes, is that minimum standards of quality and size can be established and maintained. Thus specific grades and sizes of potatoes may be shipped only from areas under an order.

Section Four of the Emergency Cotton Quota Adjustment Act prohibited price support on the 1950 crop of potatoes to producers in areas where marketing orders had been disapproved by the producers. In 1950 when the federal marketing agreement and order programs were a requirement for support, 18 states and portions of three others had marketing agreements or order programs in effect. These programs included 59 per cent of the entire 1950 crop and 69 per cent of the late crop. The producers in Kern County, California, Long Island, New York, and Upstate New York turned down the federal marketing order in 1950 despite the fact that this meant they lost support for their commodity. Since then, other areas, including Michigan, have terminated the orders. The Secretary did

have the authority to include states or areas in the price support program if he thought there was not enough time to develop and issue a marketing order or if he thought an order was impracticable for potatoes grown in such areas. Ohio producers, for example, received the benefits of price support but were not required to have a marketing order program.

Another provision of the Emergency Cotton Quota Adjustment Act limited price support for the 1950 crop to those potatoes which could be marketed under the terms of the marketing orders. Previously price support had been extended to all merchantable potatoes, including those of inferior grade which were not permitted to be marketed under marketing orders.

The "death blow" to the support program for potatoes was passed in Section Five of the same bill. This section prohibited price support for potatoes in 1951 and subsequent years unless marketing quotas were in effect. Congress felt that the requirement of compliance with production goals and marketing orders had proven to be ineffective. The Senate Committee on Agriculture and Forestry held hearings during March, 1950, on two bills which would have established a marketing quota program for potatoes. The major difference in the bills was that one authorized the use of production payments in supporting the prices. The committee recommended passage of the bill which did not contain the production payment feature.

The recommended bill provided that if the Secretary of Agriculture determined that the total supply of potatoes in the coming year was likely to exceed the estimated requirements, he must proclaim by September

l a national marketing quota and submit its terms to the growers in a referendum. If the quota were not approved by two-thirds of the producers voting, no price support operations would be undertaken for that crop. Farm marketing quotas could be issued either on a volume basis or converted into acreage allotments, based on the normal yield per acre. The penalty for marketing potatoes in excess of quotas was to be 75 per cent of the parity price on the preceding October 15. Both the producer and first buyer were to be held liable for the entire penalty. This bill, S. 3049, never reached the Senate floor for action so it died at the end of the 81st Congress.

Many interested persons felt that Congress and especially the members of the U.S. Senate took this indirect method to kill the potato support program in order to ease public criticism of the entire price support program. Furthermore, with the elections of 1950 immediately ahead, they did not want to begin hearings on the entire price support program. In requiring marketing quotas for potatoes, congressional leaders were well aware of the difficulties that would be encountered in applying them to a perishable commodity. They probably realized that farm organizations would be rather hesitant in pressing for marketing quota legislation for a perishable commodity.

The short 1951 potato crop provided a radically different price situation for the government officials and the general public. When the United States farm price of potatoes went above the parity level in December, 1951, their price was placed under price ceilings on January 19, 1952, by the issuance of Ceiling Price Regulation 113 by the Director of

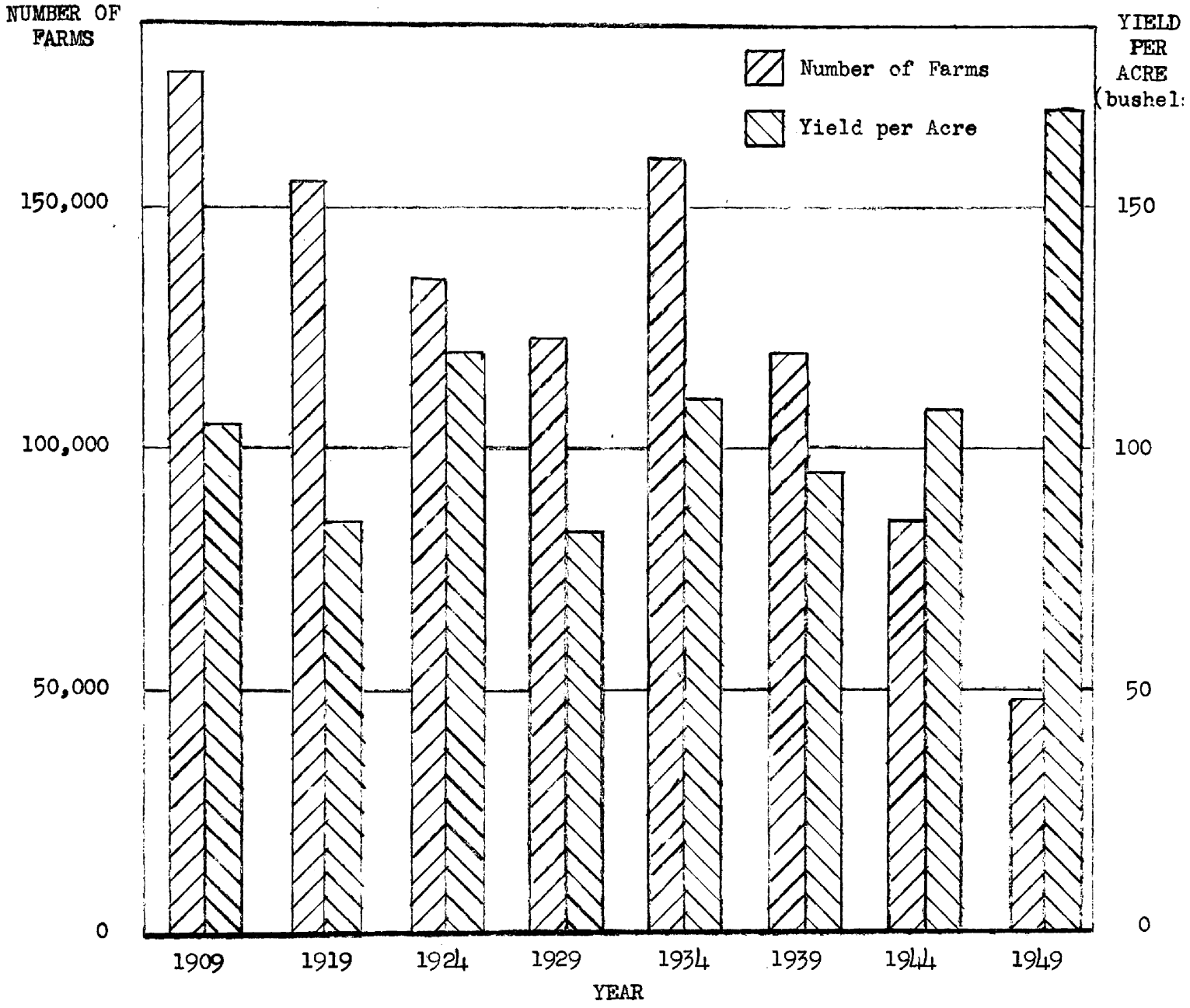
of the Office of Price Stabilization. The provisions of the Defense Production Act of 1950 stated that minimum ceilings for farm products would be the parity level or the highest level of price reached between May 24 and June 24, 1950. An amendment to this Act passed in 1951 provided that the minimum ceiling could not be below 90 per cent of the price received by growers on May 19, 1951. This later feature did not affect potatoes as the price in the spring of 1951 was relatively low. Thus, the circle from price floors and surpluses to price ceilings and shortages was completed in less than two years.

The provisions of federal legislation pertaining to potatoes since 1940 have been numerous. Perhaps no one agricultural commodity has received so much congressional attention.

Michigan's Potato Industry

Potato production in Michigan was no exception to the revolution that has taken place in the production of agricultural commodities. This fact is borne out in the increase in yield per acre and the decrease in number of farms producing potatoes in Michigan (Figure II). The number of farms in Michigan producing potatoes has decreased to one-third the number that raised potatoes in 1910. Since 1934, there has been a sharp decline from 159,002 to 49,605 farms in 1949, representing a decrease of approximately 70 per cent in 15 years.

Similar census information about the number of farms growing potatoes during 1950, 1951, or 1952 is not available to show the changes which may have taken place since the 1949 crop census. However, with the abrupt reduction of 35 per cent in Michigan's potato acreage between the 1949



Source: Data from United States Census information for the corresponding years

Figure II. Number of Farms Growing Potatoes and Yield Per Acre, Michigan, Selected Census Years, 1909-1949.

and 1952 crop, there has undoubtedly been a further decrease in the number of potato farms.

The yield per acre expanded greatly between the crop years 1939 and 1949. The increase in yields has been due to improved cultural practices and to the shift of potato acreage to better land. The better practices include the use of better quality seed, more fertilizer, increased green manure, better spraying and dusting materials, and improved equipment.

Another reason for yield increase is that potato production has become a specialized business. It requires larger investments in irrigation and in equipment such as sprayers, diggers and planters in order to produce potatoes economically. With larger financial outlays fewer farms with larger acreages in each have resulted.

There were 123 Michigan farms in 1949 that had 50 or more acres planted to potatoes. These farms represented .2 per cent of the total number of farms raising potatoes but produced 16.2 per cent of the total production (Table 1). One-eighth of the growers (those raising three acres or more) produced slightly over five-sixths of the potatoes in 1949.

The yield per acre on the farms with 50 acres or more was more than twice as large as the yield per acre on those farms with less than three acres (Table 1). The higher yields are due to better cultural practices, better land, or both.

Growers of three acres or more of potatoes have been able to increase their yields much more than growers of three acres or less. Yields of growers with fewer than three acres increased 29 per cent or from 80 to

TABLE 1

Potato Acreage, Production, and Yield, by Size of Farm,

Michigan, 1949 Crop

Acreage group	Farms reporting	Percent of total	Acres harvested	Percent of total	Quantity harvested	Percent of total	Yield per acre
Acres	Number	Percent	Acres	Percent	1,000 bu.	Percent	Bu.
No a.[1]	14,385	29.0	1,335[2]	1.6	140	1.0	105[3]
0.1-0.9	18,961	38.2	7,060	8.3	793	5.6	112
1.0-1.9	7,431	15.0	7,988	9.3	757	5.3	95
2.0-2.9	2,431	4.9	5,051	5.9	556	3.9	110
3.0-9.9	4,464	9.0	22,298	26.1	3,475	24.5	156
10.0-24.9	1,479	3.0	21,172	24.8	4,015	28.3	190
25.0-49.9	331	0.7	10,795	12.6	2,165	15.2	201
50.0 plus	123	0.2	9,778	11.4	2,305	16.2	236
Total	49,605	100.0	85,477	100.0	14,206	100.0	166

[1] Farmers reported production but did not specify acreage involved.

[2] Derived acreage for this group based on assumed yields.

[3] Assumed yield by Bureau of Agricultural Economics, USDA, for this group is based on yields for the other small size group.

Source: 1950 Census of Agriculture, Bureau of the Census.

105 bushels per acre - 25 bushels - between 1939 and 1949. Yields for growers of three acres or more increased 85 per cent or from 101 to 187 bushels per acre - 86 bushels.[22]

The per acre yields in Michigan fluctuated around the 100-bushel mark from 1910 to 1940 (Figure III). The yield in Michigan has expanded since then. However, the increase has not been as great as that for the entire country. The United States average is weighted heavily by the high yields per acre in the specialized potato-producing states of Maine and Idaho where the land and weather conditions are particularly adapted to potato growing.

As Michigan had a very poor five-year average yield from 1939-43, the increase of 84 per cent to 1950 was slightly better than that for many other regions (Table 2). Upstate New York showed an even greater percentage increase of 134 per cent over its five-year average yield of 111 bushels per acre.

The trend in potato acreage both in Michigan and the United States has been downward since 1934. Only in 1943 was there a substantial increase in acreage since the trend began. Michigan's acreage decreased to a greater extent than did that of the United States as a whole. (Figure IV).

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22 M. E. Cravens, "Trends in Michigan's Potato Industry", Michigan Farm Economics, No. 109, January, 1952.

TABLE 2

Average Yield of Potatoes, Pre-war Average, and 1950

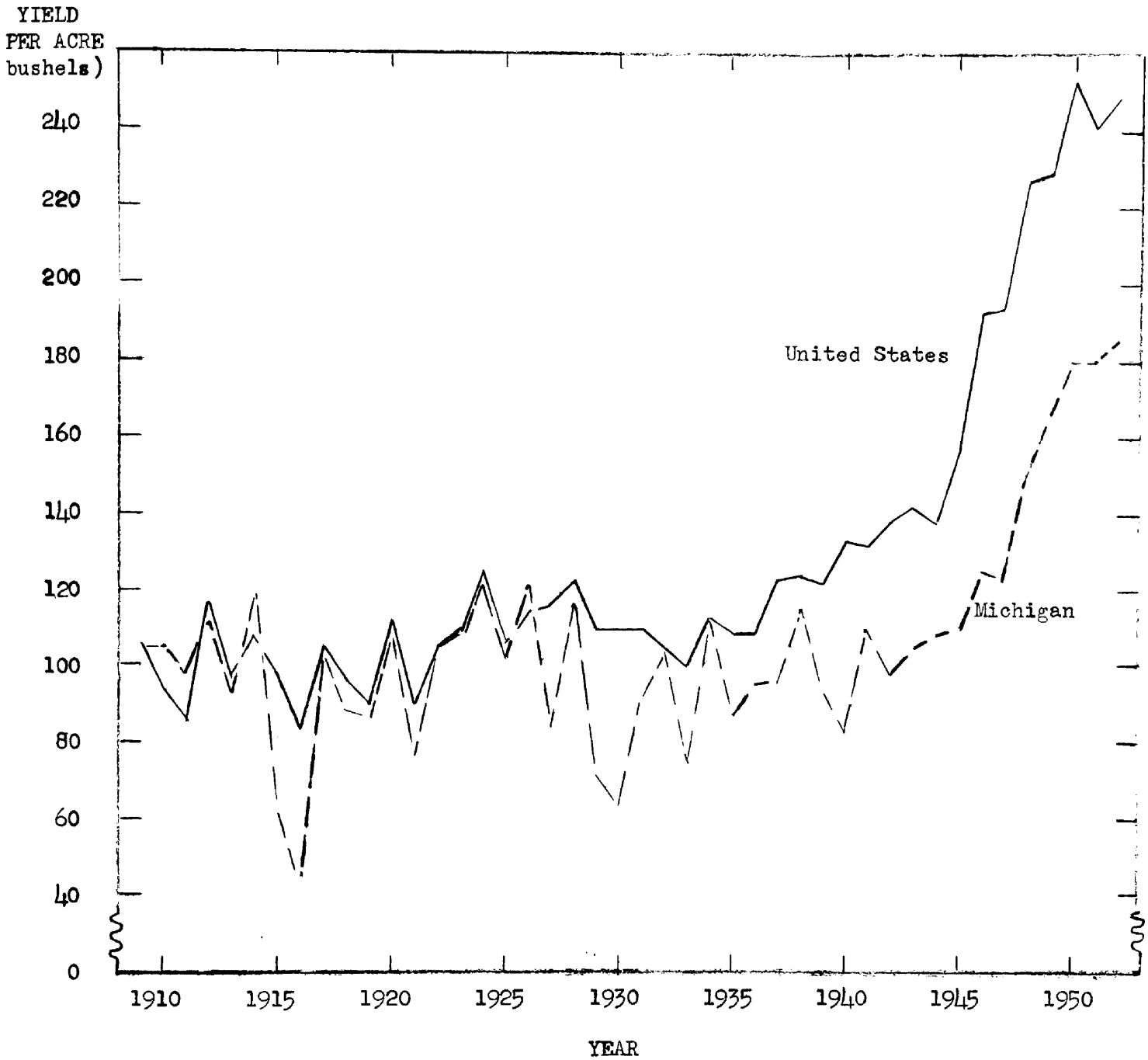
Michigan and Other Selected Areas

State or Group	Average Yield per Acre 1939-43	1950	Change
	Bushels	Bushels	Percent
Michigan	98	180	+84
Maine	284	475	+67
New York	111	260	+134
18 Surplus Late	148	269	+82
29 Late States	143	261	+83
Intermediate	118	185	+57
Early	103	179	+74
Total U.S.	133	238	+79

Source: U.S.D.A. Crop Reports

Michigan's per cent of decrease in acreage between the average for the pre-war years (1937-41) and 1950 was much greater than for the entire group of late states and the United States (Table 3). Michigan and Upstate New York had similar percentages of decline. In addition, the per cent of decrease between the pre-war years and 1946 were about equal.

In Maine, a specialized producing area, there was an increase between the pre-war average and 1946 of 39 percent.



Source: Data for United States, 1909-1929 from Agricultural Statistics, 1941, p.256; 1930-1943, Agricultural Statistics, 1948, p. 261; 1944-1949, Revised Estimates, 1944-1949, Statistical Bulletin No. 108, U.S.D.A.; 1950-1952, Annual Summary, Acreage, Yield, and Production of Principal Crops of 1951 and 1952. Data for Michigan, 1909-1950, Photostatic copy of Offical Estimates Sheet of the Division of Crop and Livestock Estimates, U.S.D.A.; 1951-1952, Annual Summary, 1952, U.S.D.A.

Figure III. Potato Yield Per Acre, In Bushels, United States and Michigan, 1909-1952

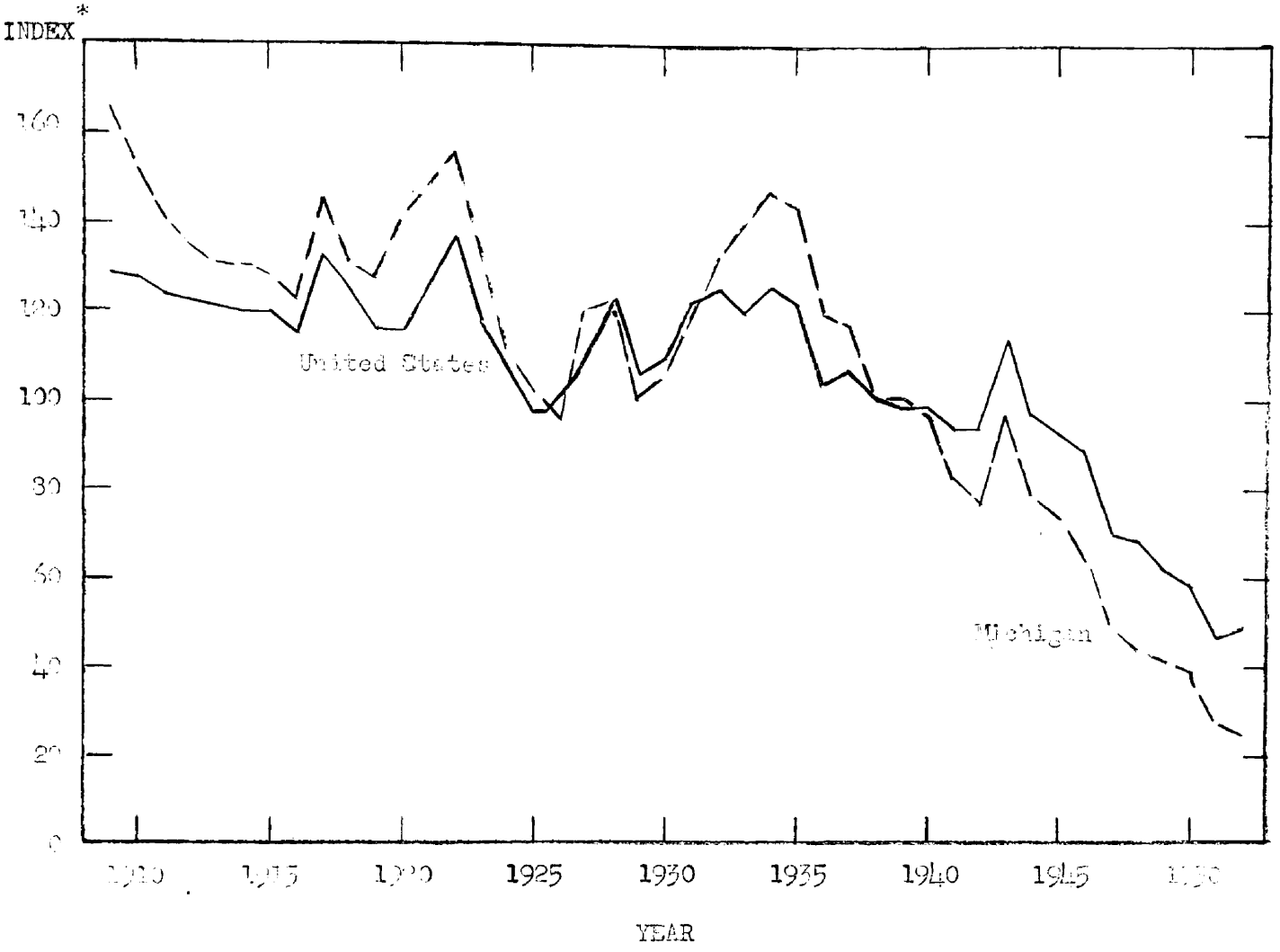
TABLE 3

Acreage of Potatoes, Pre-war Average, 1946, and 1950, Michigan and Other Selected Areas

State or Group	Acreage			Change from Pre-War to:	
	1937-41 Average	1946	1950	1946	1950
	(Thousand Acres)			(Percent)	
Michigan	220	143	85	-35	-61
Maine	157	219	130	+39	-17
New York Upstate	154	104	66	-32	-57
18 Surplus Late	1,775	1,630	1,178	- 8	-34
29 Late States	2,112	8,846	1,314	-13	-38
Intermediate	270	242	174	-10	-36
Early	470	510	359	+ 9	-24
Total U. S.	2,853	2,598	1,847	- 9	-35

Source: U.S.D.A. Crop Reports.

It would appear from Table 3 that the potato acreage allotments based on historical averages had little effect on the entire potato industry in Michigan and Upstate New York as the acreage in these areas was declining anyway. Undoubtedly the allotment program delayed the trend in the movement of acreage to larger farms. However, in Maine the allotment program based on historical data must have created many hardships as the acreage in that state was expanding until acreage controls were applied. The amount of tillable land in potatoes in Michigan was 2.7 per cent in 1934



* 1937-41 = 100

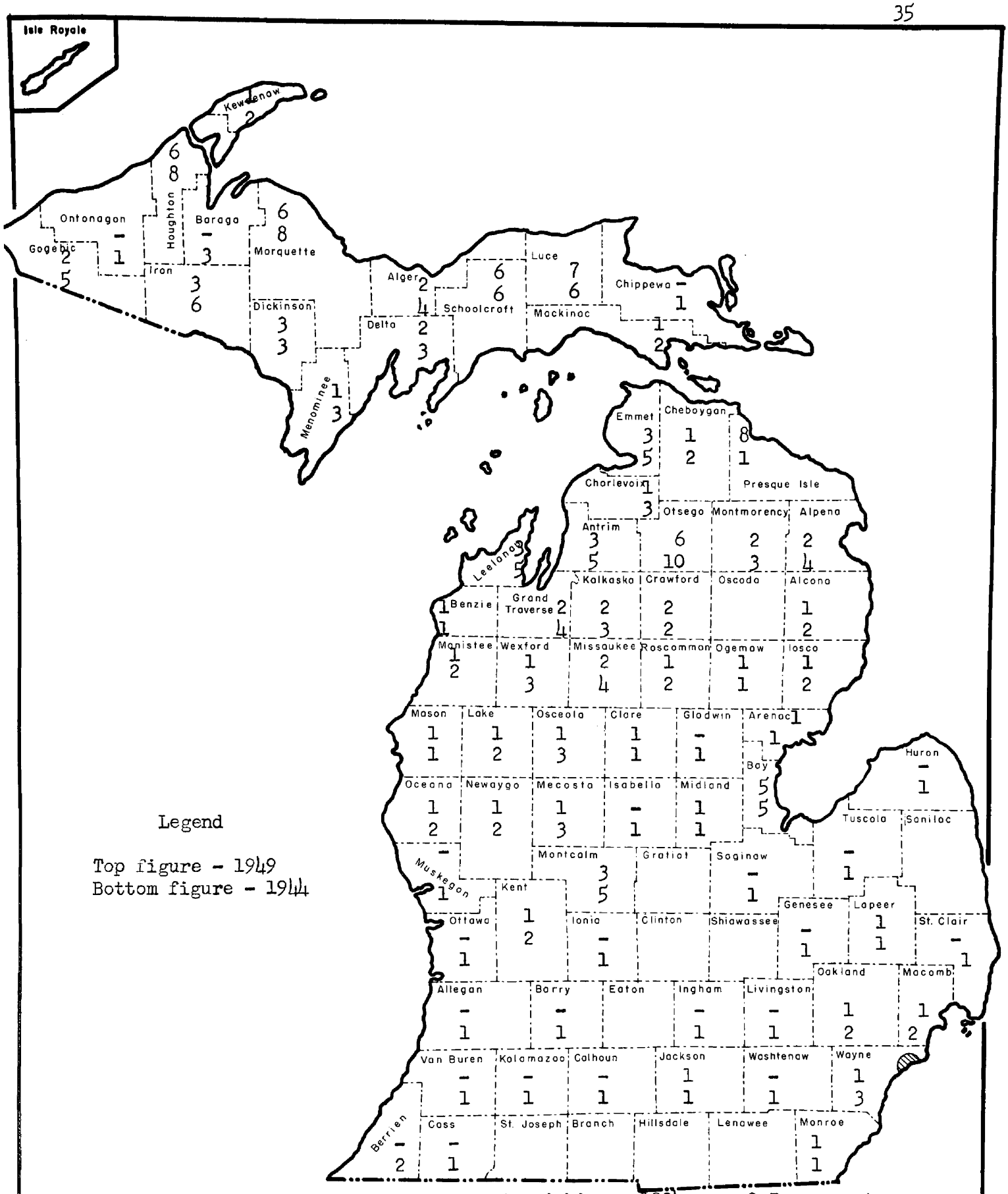
Source: Data for United States, 1909-1929 from Agricultural Statistics, 1941, p. 256; 1930-1943, Agricultural Statistics, 1948, p. 261; 1944-1949, Revised Estimates 1944-1949, Statistical Bulletin No. 108, U.S.D.A.; 1950-1952, Annual Summary, Acreage, Yield, and Production of Principal Crops of 1951 and 1952, U.S.D.A. Data for Michigan, 1909-1950, Photostatic copy of Offical Estimates Sheet of the Division of Crop and Livestock Estimates, U.S.D.A.; 1951-1952, Annual Crop Summary, 1952, U.S.D.A.

Figure IV. Index of Harvested Acreage, United States and Michigan, 1909-1952

and .8 per cent in 1949 (Figure V). Between 1934 and 1949 there was a steady downward trend in per cent of the land being planted to potatoes in Michigan. In only two counties - Presque Isle and Luce - did the per cent of tillable land in potatoes increase between 1944 and 1949. Michigan's production has fluctuated more than that of the entire United States. Although production in the United States has remained relatively constant, there was a slight trend upward since the mid-thirties. In Michigan the trend has been opposite to the country-wide trend of potato production. Since 1934, Michigan's production has decreased very markedly (Figure VI).

The extent to which Michigan's production trend has been contrary to that of the United States, as well as to other areas within the United States, is shown in Table 4. Michigan has had decreases of 18 and 30 per cent, respectively, in the pre-war average production between 1946 and 1950. Despite the fact that Upstate New York's acreage decreased by about the same percentage as Michigan, its total production increased. This is because the increase in yield was greater in Upstate New York. The 18 surplus late states and the 29 late states had increases of 29 and 22 per cent, respectively, between the pre-war average and 1950.

In addition to the upward trend of yield and the downward trends of production and acreage in Michigan, there has been an important shift in the location of the acreage on which potatoes are grown. In 1924, the counties in the region of southwestern, southern, and southeastern Michigan harvested 43.2 per cent of the acreage in Michigan and in 1949 only 24.5 per cent (Figure VII). The Upper Peninsula's percentage of



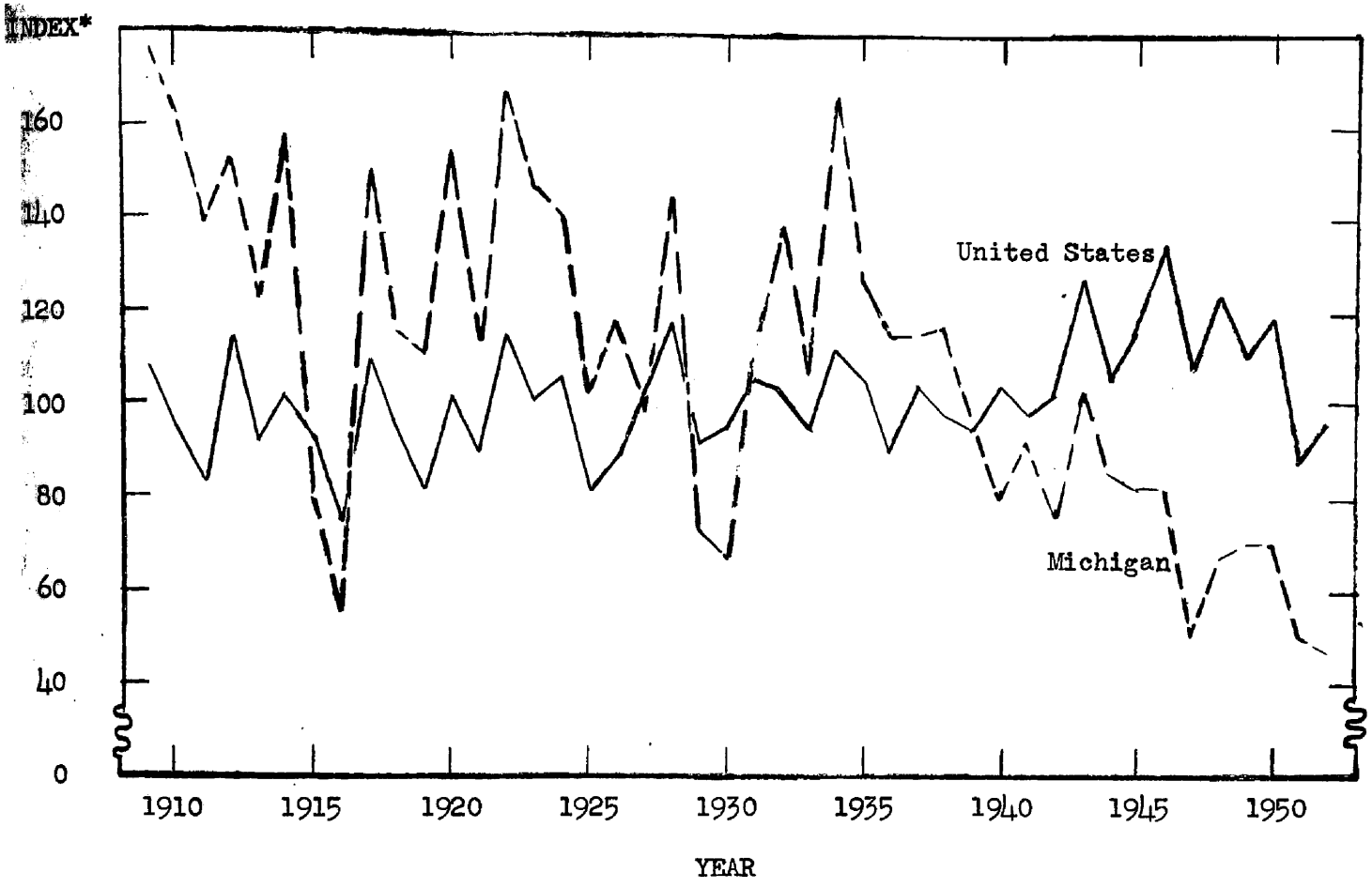
Legend

Top figure - 1949
Bottom figure - 1944

Per cent of tillable land in potatoes in Michigan, 1934, was 2.7 per cent; 1944, 1.5 per cent; and 1949, .8 per cent.

Source: E.B. Hill and R. G. Mawby, Census Maps of Michigan 1950, Agricultural Economics Department, Michigan State College, 1952, p. 20.

Figure V. Per Cent of Tillable Land in Potatoes, By Counties, Michigan, 1944 and 1949



* 1937-41 = 100

Source: Data for United States, 1909-1929 from Agricultural Statistics, 1941, p. 256; 1930-1943, Agricultural Statistics, 1948, p. 261; 1944-1949, Revised Estimates 1944-1949, Statistical Bulletin No. 108, U.S.D.A.; 1950-1952, Annual Summary, Acreage, Yield, and Production of Principal Crops of 1951 and 1952, U.S.D.A. Data for Michigan, 1909-1950, Photostatic copy of Offical Estimates Sheet of the Division of Crop and Livestock Estimates, U.S.D.A.; 1951-1952, Annual Crop Summary, 1952, U.S.D.A.

Figure VI. Index of Potato Production, United States and Michigan, 1909-1952

TABLE 4

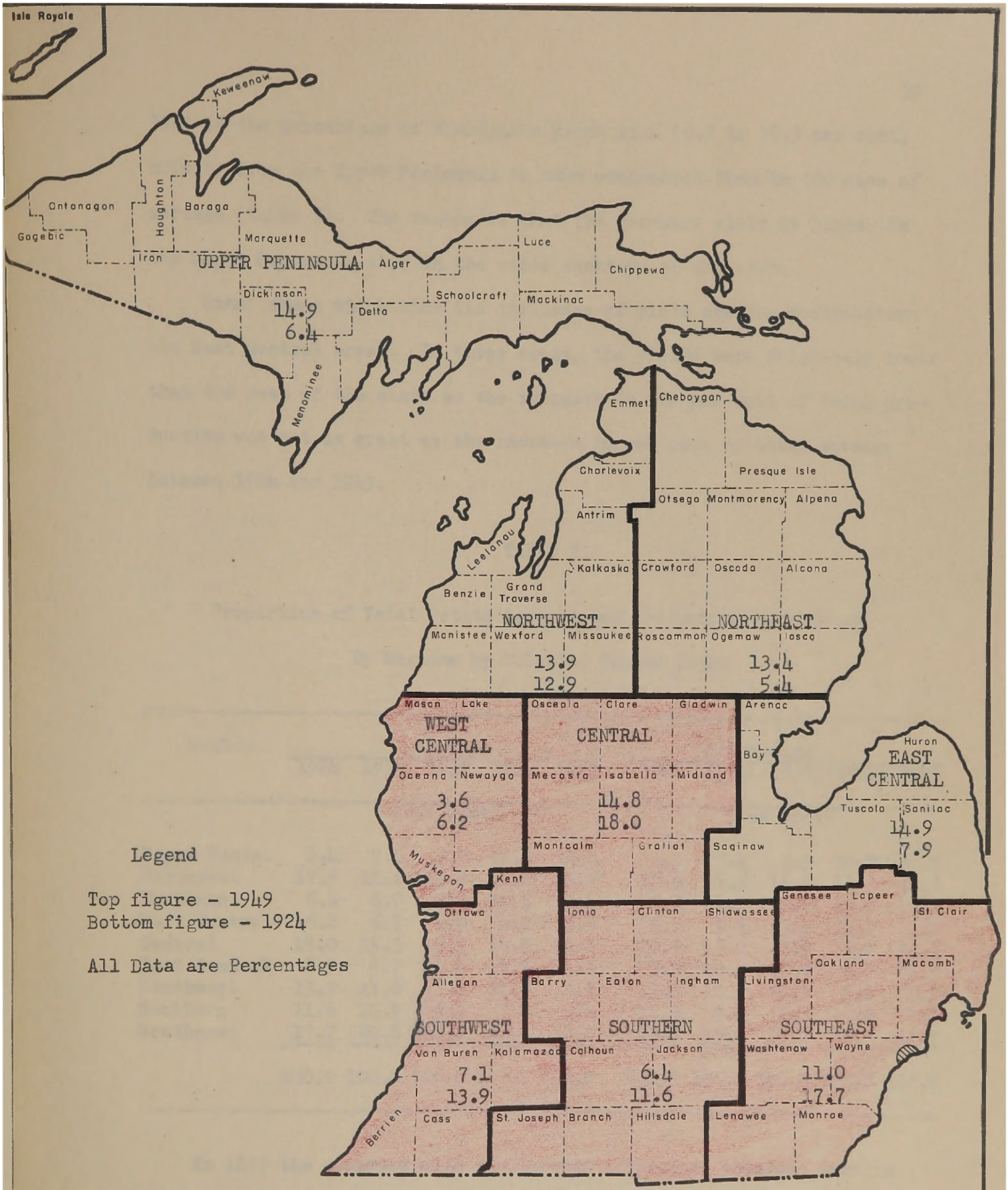
Production of Potatoes, Pre-war Average, 1946, and 1950, Michigan and Other Selected Areas

State or Group	Production			Change from Pre-War to:	
	1937-41 Average	1946	1950		
	(Million Bushels)			(Per Cent)	
Michigan	21.8	17.9	15.3	-18	-30
Maine	41.7	78.4	61.8	+88	+48
New York Upstate	16.1	19.2	17.2	+19	+ 7
18 Surplus Late	245.1	333.0	316.5	+36	+29
29 Late States	281.6	365.2	343.0	+30	+22
Intermediate	32.6	38.2	32.2	+17	- 1
Early	47.2	80.7	64.3	+71	+36
Total U. S.	361.5	484.2	439.5	+34	+22

Source: U.S.D.A. Crop Reports

the total acreage increased steadily from 6.4 per cent in 1924 to 14.9 per cent. The Northeastern and East Central Regions with Presque Isle and Bay, respectively, the principal potato producing counties in each region, increased their percentage from 13.3 per cent in 1924 to 28.3 per cent in 1949 (Table 5).

Coinciding with the change in the location of the potato acreage in Michigan has been the shift in production. The change between 1924 and



Legend

Top figure - 1949
Bottom figure - 1924

All Data are Percentages

Shaded area indicates region's proportion of the total state acreage decreased between 1924 and 1949.

Figure VII. Division of Harvested Acreage of Potatoes by Regions, Michigan, 1924 and 1949.

1949 in the percentage of Michigan's production (6.2 to 18.3 per cent) arising from the Upper Peninsula is more pronounced than in the case of acreage (Table 5). The reason is that the per-acre yield is higher in the Upper Peninsula than in the other sections of the state.

Other areas which show the influence of yield are the Northeastern and East Central areas. In these areas, the yields were relatively lower than the rest of the state so the increase in the per cent of total production was not as great as the increase in per cent of total acreage between 1924 and 1949.

TABLE 5

Proportion of Total Potato Acreage and Production in Michigan by Regions by Selected Census Years

Region	Acreage					Production				
	1924	1934	1939	1944	1949	1924	1934	1939	1944	1949
	(Per Cent)					(Per Cent)				
Upper Penin.	6.4	7.5	7.9	11.8	14.9	6.2	7.4	7.5	16.0	18.3
Northwest	12.9	12.6	13.2	12.4	13.9	13.6	12.5	15.5	16.2	14.3
Northeast	5.4	6.7	7.9	10.5	13.4	5.1	7.1	7.2	13.0	11.9
West Central	6.2	5.1	4.9	4.2	3.6	5.6	5.6	5.2	4.2	2.7
Central	18.0	15.3	15.5	14.0	14.8	20.1	17.0	17.9	17.2	16.3
East Central	7.9	9.7	10.4	11.5	14.9	7.5	10.9	11.6	8.7	11.5
Southwest	13.9	11.6	11.9	11.4	7.1	13.1	11.2	10.6	8.0	6.2
Southern	11.6	10.9	9.7	7.8	6.4	11.3	9.0	9.3	5.8	7.1
Southeast	17.7	20.6	18.6	16.4	11.0	17.5	19.3	15.2	10.9	11.7
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In 1899 the counties with the largest acreage of potatoes were in order: Montcalm, Kent, Oakland, Wayne, and Houghton.[23] Montcalm remained

[23] William E. Dickinson, Trends in Michigan Agriculture, 1900-1945. Unpublished Ph.D. thesis, Michigan State College 1950, p. 87.

the county with the largest acreage until the census of 1949 when Bay County was the largest (Table 6). Kent County dropped to eighth in

TABLE 6

Ten Michigan Counties with the Largest Potato Acreages in Selected Census Years

Order 1924	1934	1939	1944	1949
1. Montcalm	Montcalm	Montcalm	Montcalm	Bay
2. Oakland	Lapeer	Lapeer	Bay	Montcalm
3. Kent	Oakland	Kent	Presque Isle	Presque Isle
4. Lapeer	Kent	Oakland	Oakland	Houghton
5. Mecosta	Tuscola	Tuscola	Houghton	Antrim
6. Osceola	Mecosta	Mecosta	Kent	Leelanau
7. Tuscola	Osceola	Bay	Macomb	Otsego
8. Grand Traverse	Grand Traverse	Osceola	Mecosta	Kent
9. Leelanau	Macomb	Presque Isle	Monroe	Missaukee
10. Berrien	Missaukee	Macomb	Berrien	Lapeer

acreage by 1949, Oakland was not in the first ten in 1949. Wayne was not among the first ten by 1924, and Houghton was fifth and fourth, respectively, in 1944 and 1949. Montcalm has been the leading producing county in each of the census years. Kent dropped steadily from second to ninth, Oakland and Tuscola were not in the list by 1944, Bay joined the top ten in 1944 and 1949 (Table 7). Marquette and Delta, Upper Peninsula counties, were among the top ten producing counties in 1949 for the first time.

TABLE 7

Ten Michigan Counties with the Largest Potato Production in Selected Census Years

Order 1924	1929	1934	1939	1944
1. Montcalm	Montcalm	Montcalm	Montcalm	Montcalm
2. Kent	Lapeer	Lapeer	Presque Isle	Bay
3. Oakland	Kent	Bay	Houghton	Presque Isle
4. Lapeer	Tuscola	Mecosta	Bay	Houghton
5. Mecosta	Oakland	Kent	G. Traverse	Antrim
6. Osceola	Mecosta	Osceola	Mecosta	Lapeer
7. G. Traverse	Osceola	Tuscola	Kent	Marquette
8. Leelanau	Macomb	G. Traverse	Antrim	Jackson
9. Tuscola	G. Traverse	Oakland	Otsego	Kent
10. Isabella	Antrim	Missaukee	Leelanau	Delta

Despite the fact that Michigan's production and acreage figures were decreasing, the state still produced, in the crop years 1945 through 1950, more potatoes than could be marketed. The government purchased the surplus under the mandatory price support program which was in effect during these years. In 1950, one-fourth of the total crop in Michigan was produced by the government through price support operations (Table 8). In the last three years of the support program (1948-1950) approximately one bushel out of every five produced in Michigan was sold to the government as surplus potatoes. The Department of Agriculture purchased a larger percentage of the Michigan crop than of the total United States crop only from the 1945 and 1950 crops (Table 8).

TABLE 8

Per Cent of Total Crop and Number of Bushels of Potatoes Purchased Through Support Operations, Michigan and United States, Crop Years 1945 Through 1950

Crop Year	Michigan		United States	
	Number of Bushels	Per Cent of Total Crop	Number of Bushels	Per Cent of Total Crop
	(Thousands)	(Per Cent)	(Thousands)	(Per Cent)
1945	1,344	7.5	24,002	5.7
1946	2,749	15.4	108,205	22.2
1947	437	4.0	34,227	8.8
1948	2,602	17.9	136,045	30.2
1949	2,151	14.1	75,322	18.7
1950	3,806	24.9	101,192	23.0

Source: Production and Marketing Administration, United States Department of Agriculture

The 1950 commodity cost for the 3,806,000 bushels purchased in Michigan was $2,664,000. The surplus both in Michigan and the United States was composed of approximately 60 per cent U. S. No. 1 and U. S. Commercial grades (Table 9). The grade basis of the government purchases from both the Michigan and United States crop was about equal. There was only a slightly higher percentage of U. S. No. 1 Size B and culls in the Michigan purchases.

TABLE 9

Grade of Surplus Potatoes Purchased in Michigan and United States, by Quantity and Per Cent, 1950

Grade	Michigan Surplus		United States Surplus	
	Quantity	Per Cent	Quantity*	Per Cent
	1,000 cwt.		1,000 cwt.	
U.S. No. 1 and U.S. Commercial	1,306	57.1	37,002	60.5
U.S. No. 2	600	26.4	16,167	26.5
U.S. No. 1 (Size B)	170	7.4	3,996	6.5
Culls	208	9.1	3,979	6.5
Total	2,284	100.0	61,165	100.0

*Totals do not tally because of rounding of data.

Source: Potato Divison, PMA, USDA

From the 1945 crop seven per cent of the government purchases were made in Michigan, but only one per cent of the 1947 purchases were made in this state (Table 10). About one-third of the total quantity purchased each year by the government from the 1945 through 1950 crops was made in Maine. Potato producers of no other state received so much assistance from the government.

Another trend affecting the potato industry of Michigan is the rapidly declining per capita consumption of potatoes (Figure VIII). The estimated civilian consumption of potatoes has decreased from 195 pounds per person in 1910 to 99 pounds in the fiscal year 1951-1952.[24]

[24] United States Department of Agriculture, The National Food Situation, Oct.- Dec., 1952, p. 26.

This is an actual decrease of approximately two and one-half pounds a year per person.

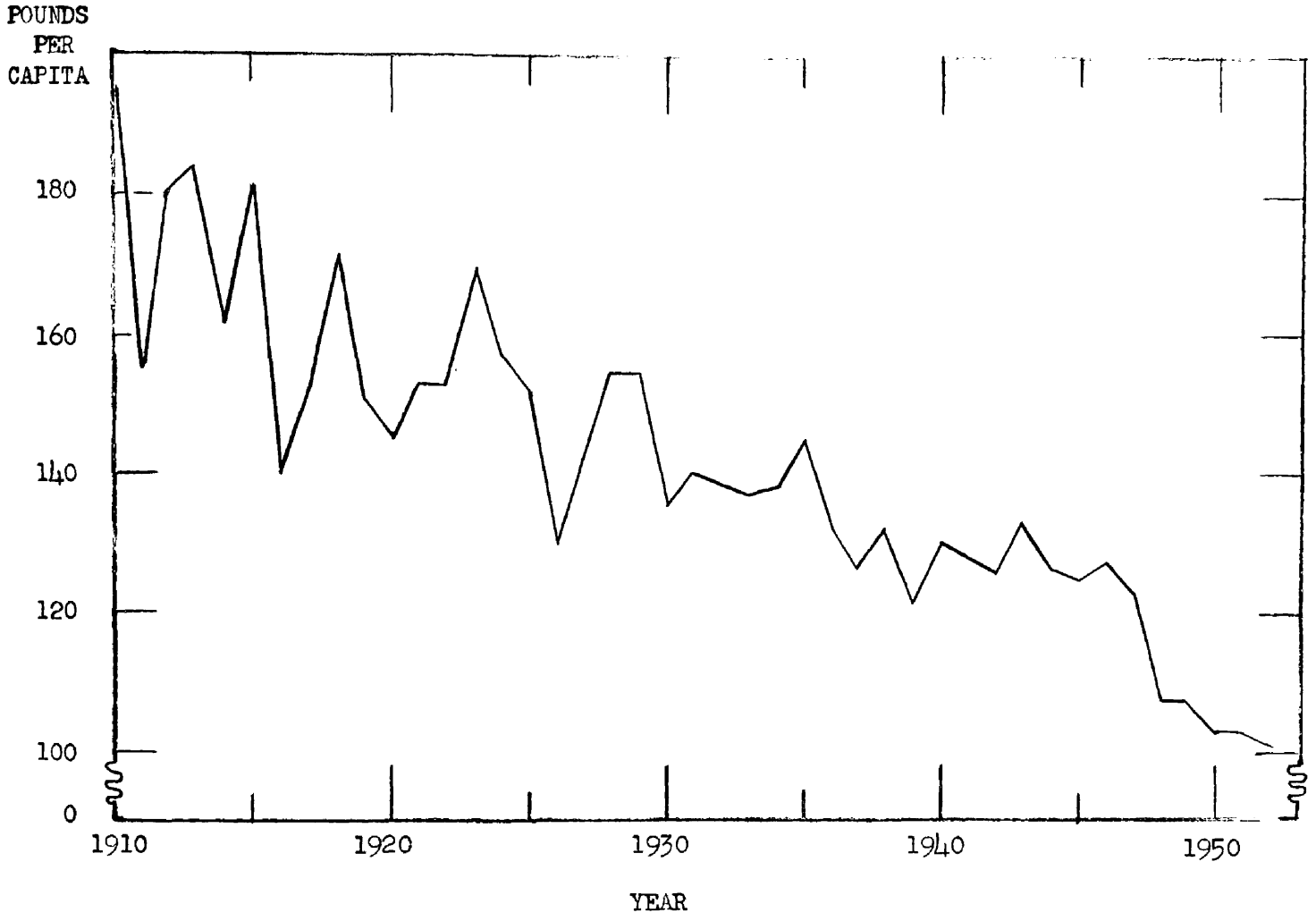
TABLE 10

Government Surplus Purchases of Potatoes by Principal States, Crop Years 1945 - 1950, in Per Cent

State	1945	1946	1947	1948	1949	1950
	(Per Cent)					
Maine	30.6	34.2	41.1	32.0	38.5	34.3
New York	5.8	10.8	15.4	12.3	11.9	--
Michigan	6.8	2.6	1.3	1.9	2.8	3.7
Minnesota	12.3	3.9	3.7	3.3	4.2	6.1
North Dakota	14.5	6.3	1.5	5.2	10.4	13.0
Idaho	0.3	5.7	--	7.1	4.0	8.0
New Jersey	14.4	4.8	16.3	6.2	3.2	9.0
Other	15.3	31.7	20.7	32.0	25.0	25.9
	100.0	100.0	100.0	100.0	100.0	100.0

The growth of population has been sufficient to prevent a downward trend in total consumption of potatoes. However, if per capita consumption could be held at the present level, the future growth in population would raise the total consumption above current levels.

Many things affect potato consumption. It is impossible to continue to eat more of everything. Thus, as consumption of some foods increases, consumption of other foods must decrease. As incomes have increased, potatoes have been replaced by other vegetables which in the past years have become more widely available geographically and throughout the year. People have become desirous of a variety of foods in their diet. And,



Source: Data for 1910-1948 from Consumption Of Food In The United States, 1909-48, Miscellaneous Publication No. 691, United States Department of Agriculture, p.83; 1949, The National Food Situation, April-June, 1951, p. 4; 1950-1952, The National Food Situation, April-June, 1953, p. 4.

Figure VIII. Per Capita Consumption of Potatoes, United States, 1910-1951

as people perform less physical labor, their demand for potatoes decreases. Families living in cities eat fewer potatoes on the average than do farm families. Thus, as more of our families are living in the cities and the laborers are doing less physical labor, there has been a decreasing per capita consumption of potatoes.

In summary, there has been a downward trend in the harvested acreage of potatoes in Michigan. Since this offset only in part by the increased yield per acre, the total production in the state of Michigan has also decreased. The downward decline in harvested acreage in Michigan was much greater than that in the United States.

The total production curve for the United States is sloping slightly upward. This is due in part to the shift of production to the regions where higher yields are attained. This shift has also taken place in Michigan as the potato acreage and production have moved to those counties specializing in the production of potatoes. These areas of Michigan are found principally in the Upper Peninsula and the northern half of the Lower Peninsula. In these areas farmers have been able to substitute profitably very few cash crops. The number of Michigan farmers producing potatoes has also decreased. However, there is a larger acreage of potatoes being harvested per farm. As the potato business is becoming highly specialized, large sums of capital have necessarily been invested in equipment. In addition to the acreage yield and production shifts, the entire potato industry of the nation is faced with the declining per capita consumption of potatoes. Nevertheless, total requirements for potatoes have remained relatively constant because of the increasing population.

Elasticity of Demand for Potatoes

The elasticity of demand for agricultural commodities is very important when considering policy relating to them. If programs for price supports are adopted, different programs should be in effect concerning a commodity for which the demand is elastic as compared to a commodity for which the demand is inelastic. The demand for potatoes is regarded as inelastic by everyone. For example, it has been observed that a 10 per cent reduction in the retail price has brought about an increase of only two or three per cent in total purchases. Very few housewives, in a recent survey conducted by the United States Department of Agriculture, indicated that they would alter their potato purchases even if there were changes in prices as long as quality was good.[25]

Two studies reported by Waite and Trelogan in their book Agricultural Prices indicate the following regarding the elasticity of demand for potatoes: Minneapolis Market from 1902 - 24, 0.46; U. S. Farm from 1915 to 1929, 0.30.[26]

As consumers do not greatly increase their use of potatoes when the price is low, any surplus of potatoes is quickly reflected in very low prices for the entire supply. This explains why large crops of potatoes are worth much less than small crops. In order to increase the total revenue from a crop for which the elasticity of demand is less than one, it is necessary to curtail the quantity sold and increase the price.

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[25] United States Bureau of Agricultural Economics, Potato Preferences among Household Consumers, United States Department of Agriculture, Misc. Pub. 667, p. 116.

[26] W. C. Waite and Harry C. Trelogan, Agricultural Prices, Wiley Press, 1948, p. 46.

Thus, in addition to the fact that potato producers are faced with the situation of declining per capita consumption and increasing yield per acre, the demand for their product is very inelastic.

CHAPTER III

TECHNIQUES AND PROCEDURES

Cooperation with Regional Project

The Division of Agricultural Economics of the University of Minnesota has undertaken a study for the North Central Regional Technical Committee on Potato Marketing. The over-all plan of the project has been the development of an intensive and integrated study of the impact of government programs on the potato industry.

A segment of the study included a survey of the attitudes of a representative cross-section of potato farmers in six states. The distribution of the six hundred schedules taken for the Minnesota study was as follows: Maine, 100; Michigan, 125; Wisconsin, 125; Nebraska, 100; and Minnesota and North Dakota, 150.

It was necessary, therefore, for the University of Minnesota study to select a group of Michigan counties in which a sample of 125 schedules would be taken. In order to complete the 250 interviews to be used in this study, another group of counties was selected in which to take an additional 125 schedules.

Selection of Counties

The final selection of the sample counties was influenced by two objectives: first, to make the sample as representative as possible of

Michigan; second, to obtain a large enough sample to assure reliability of the final results with economy of time and money. Fifteen counties were selected to represent the entire state. These counties were Houghton, Delta, Emmet, Otsego, Grand Traverse, Manistee, Presque Isle, Osceola, Bay, Montcalm, Allegan, Cass, Ingham, Jackson, and Oakland (Figure IX).

The basis for selection of these counties was the division of the state into marketing areas (Figure X). Four distinct marketing areas resulted when the farm price received per bushel for potatoes in 1940 was plotted. From each marketing area the counties were selected on the basis of their similarity to the entire marketing area. Consideration in the individual county selection was given to the type of farming, varieties, potatoes grown, marketing practices, degree of potato specialization, and soil type.

The counties included in the survey can also be divided so as to represent the three marketing districts of Michigan as defined in the amended Federal Marketing Order No. 60 (Figure IX). This division into marketing districts will be of assistance in showing the economic significance between the attitudes of the growers and their location.

Selection of the Sample to be Interviewed

In order to attain the objective of trying to sample the commercial potato industry in Michigan, only farmers producing three acres or more of potatoes in 1950 were included in the interview. A commercial potato farm is defined by the Bureau of Census as one producing three acres or more of potatoes. Information concerning the number of potato farms in each county was obtained from the state office of the P.M.A. (Table 1-Appendix A).

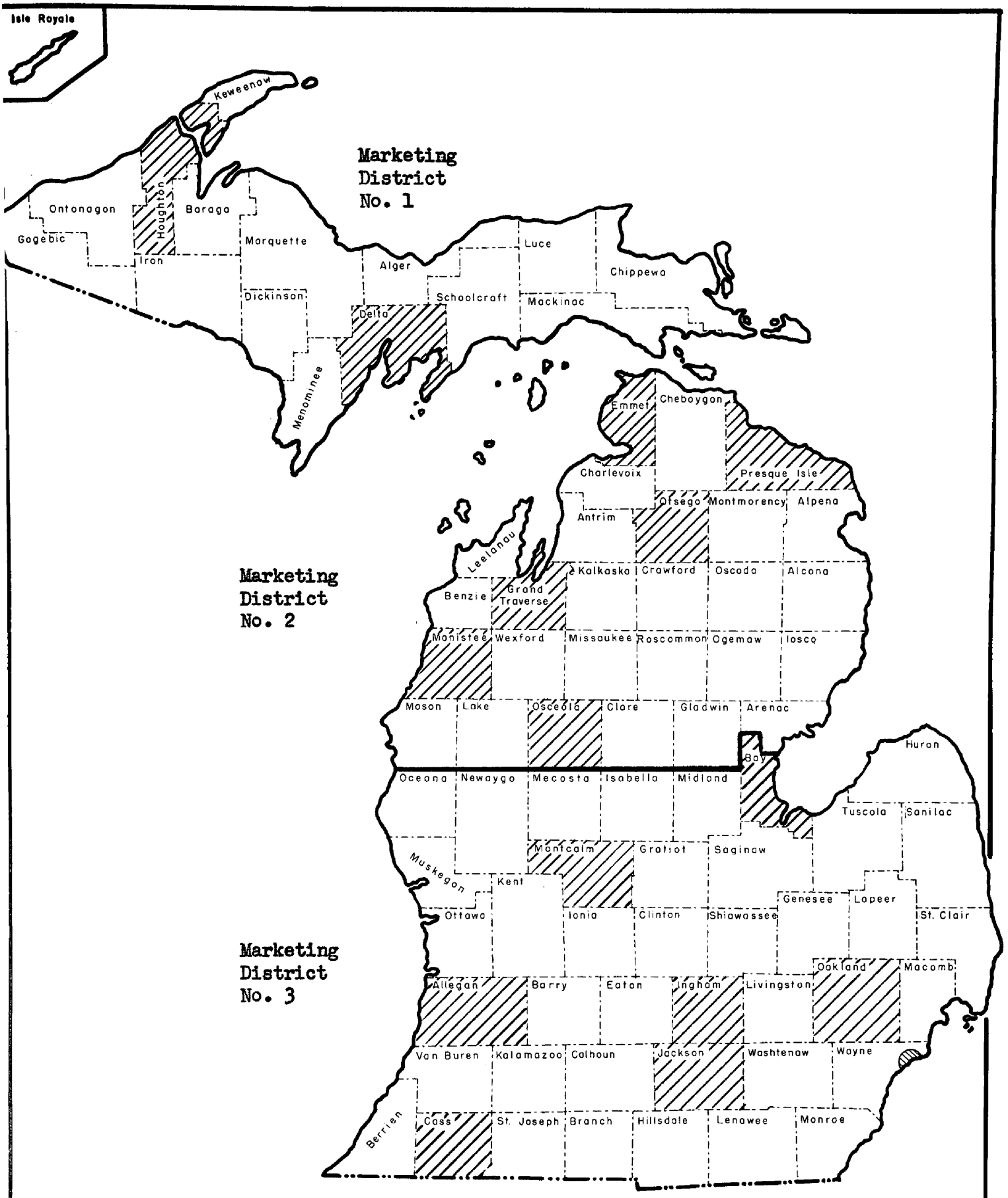

Figure IX. Location of the Fifteen Counties in the Three Marketing Districts Included in the Potato Survey, Michigan, 1950.

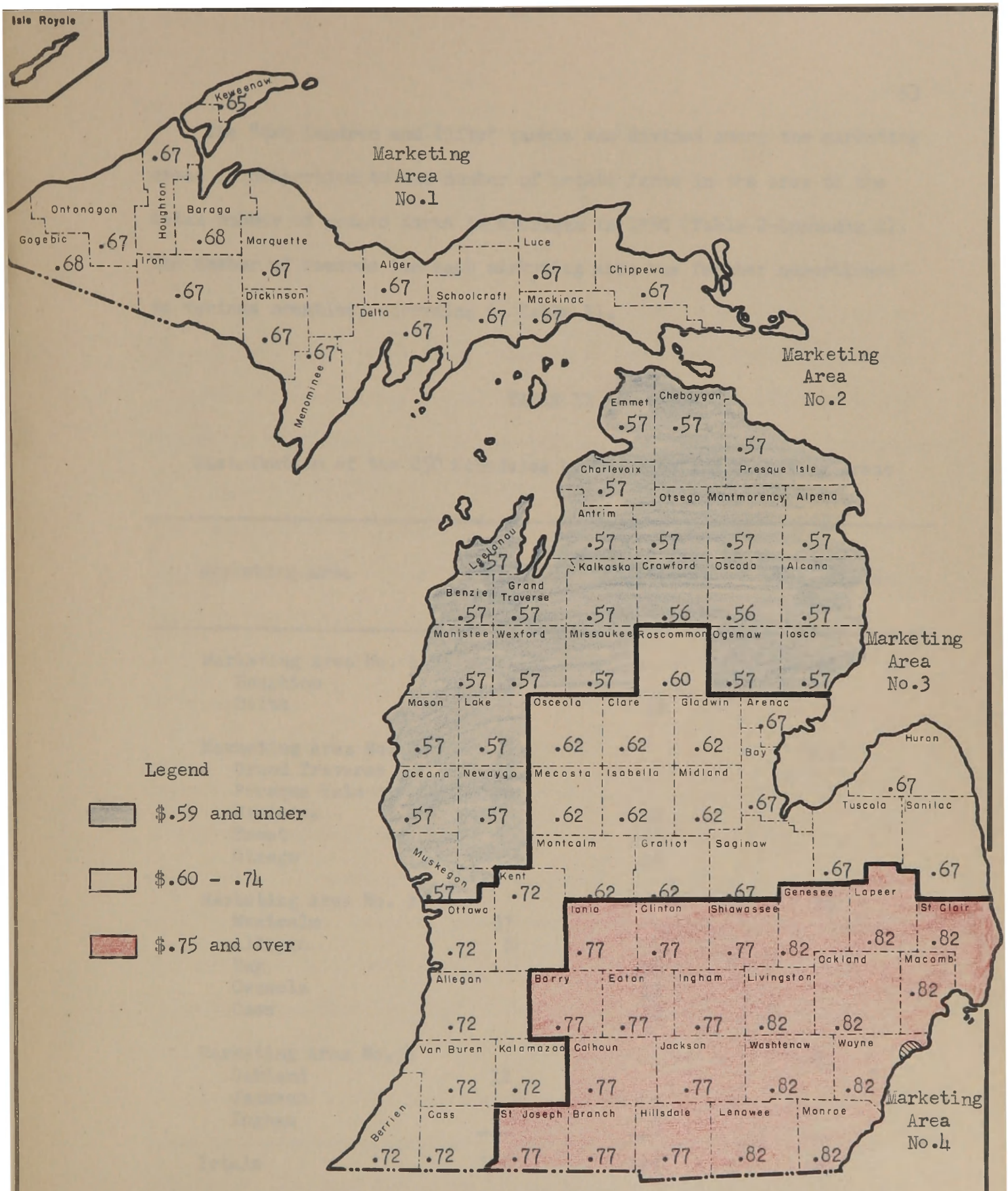

Figure X. Marketing Areas Based on Farm Price Per Bushel, Michigan, 1940

The "two hundred and fifty" sample was divided among the marketing areas in proportion to the number of potato farms in the area to the total number of potato farms in Michigan in 1950 (Table 2-Appendix A). The number of records for each marketing area was further apportioned to various counties, according to Table 11.

TABLE 11

Distribution of the 250 Schedules by Counties and Marketing Areas

Marketing Area	Schedules Used in the Minn. Study	Additional	Mich. State Study
Marketing Area No. 1			36
Houghton	17		
Delta		19	
Marketing Area No. 2			101
Grand Traverse	25		
Presque Isle	26		
Manistee		12	
Emmet		20	
Otsego		18	
Marketing Area No. 3			89
Montcalm	37		
Allegan	8		
Bay		20	
Osceola		12	
Cass		12	
Marketing Area No. 4			24
Oakland	12		
Jackson		6	
Ingham		6	
Totals	125	125	250

The 1950 records of the P.M.A. were used to select the sample because they contained the most complete and most recent list of commercial potato growers. The one limitation to the use of this information was that the state records included all farms to which an acreage allotment was given. In many instances, although the farm received an allotment of more than three acres, fewer than three acres were actually planted.

Each of the fifteen P.M.A. offices in the counties selected in the survey had the names of all commercial growers, both those who participated in the price support program for potatoes in 1950 and those who did not. The records also contained information as to the measured acreage for the crop year 1950. These county lists were then broken down into three equal groups by size of potato acreage and from these groups a random sample was drawn. The method used to determine the sample is described in Appendix A.

The principal disadvantage in the use of the county data was the difference found between the measured acreage of potatoes in 1950 and the farmer's estimate of his potato acreage for that year. When differences were noted, the measured acreage was usually lower than the farmer's estimate. It will never be known whether the measured acreage figure was accidentally or deliberately lower. It is to be recalled that in order to obtain the advantage of price support the measured acreage of a farm had to be equal to or below the alloted acreage for this farm.

In order to ensure that a sufficient number of interviews had been taken to guarantee reliability of the results, comparisons were made between the standard deviations of the means and the means for the 1951

yield observations given for certified seed, for seed one year from certification, for seed more than one year from certification, and for the total.[1] As the standard deviation of the mean was within 5.5 per cent of the mean for each of the four categories, it was decided that 250 schedules were sufficient.[2]

The characteristics of the farmers included in the survey are shown in Appendix B.

Enumeration and Questionnaires

Five students were selected as interviewers: three graduate students and two seniors. These men all had farm backgrounds or farm experience. However, the majority of the records were taken by the author since most of the extra assistance was available for only one week. The enumerators were required to read carefully several sets of instructions and to adhere to them closely. Copies of each of these sets are included in Appendix C. The enumerators were also briefed on the project so as to give them an understanding of what the survey was attempting to do. Telephones were used for making appointments for interviews whenever possible. This greatly improved the efficiency of those operating in the field. The length of time for each interview varied from one

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[1] Based on interviews with Dr. William D. Baten, Statistician for the Michigan Agricultural Experiment Station.

[2] Certified seed, standard deviation of the mean was 4.0 per cent of the mean; seed one year from certification, 4.7 per cent; seed more than one year from certification, 5.5 per cent; and the total, 2.8 per cent.

to two hours with the average being an hour and a half. Examples of the two questionnaires used in the primary study are included in Appendix D.

One questionnaire was supplied by the University of Minnesota and contained six pages with seventy-two questions.[3] The authors of the questionnaire state that no fewer than a dozen persons participated directly in the formulation of the questions. A preliminary draft of the questionnaire was tested in Clay County, Minnesota. The final questionnaire was developed from the experience gained in the pre-test and from suggestions from the personnel in the Bureau of Agricultural Economics Division of Special Surveys.

In addition to the Minnesota questionnaire, which was primarily aimed at determining the growers' attitudes to the price support program for potatoes, a schedule was developed at Michigan State College.[4] A preliminary draft of the Michigan State Questionnaire was pre-tested among growers in Ingham and Eaton Counties. At the same time, the enumerators either secured the information in the presence of the author or heard him ask the questions. Thus the pre-test interviews served as a training period and also aided greatly in the development of the questionnaire.

The Michigan State Questionnaire was used to obtain such additional material as was required for the Michigan State Study. From this schedule questions were asked to determine the growers' attitudes toward marketing

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[3] Hereafter referred to as the Minnesota questionnaire.

[4] Hereafter referred to as the Michigan State questionnaire.

orders, marketing quotas, and price ceilings; their participation in the price support program; and their production and marketing practices.

Much more information was secured in the interview than will be used in this thesis. However, it was anticipated that the added material might be used by other persons for different studies.

In January, 1953, a questionnaire was mailed to the 250 farmers interviewed in the spring of 1952. The purpose of the additional information was to determine whether the growers' attitudes regarding price support might have changed, to determine the relationship between his "guesstimate" of the November, 1953, farm price for potatoes and his desire for support for the 1953 crop, and to determine the farm organizations to which the producer belonged, since the latter was not asked during the original interview. A postal card reminder and a second letter accompanied by a copy of the questions were sent at two-week intervals following the initial mailing.[5] The two letters, questionnaire, and postal card used in making the mail survey are shown in Appendix E. The material on the questionnaires was coded and punched on International Business Machines cards. Information on the 250 Minnesota questionnaires was coded and punched at the University of Minnesota. Answers on the Michigan State questionnaires were coded by the author.

Time of the Study

The 250 personal interviews were made in the spring of 1952 between March 24 and June 20 (Table 3-Appendix A). The farm price of Michigan

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[5] The response from the original mailing was 40 per cent; the postal card reminder increased the per cent of return to 68.8; and the final return was 82.4 per cent.

potatoes was rising at this time and was very favorable compared to potato prices since World War II (Figure XI). All the farmers interviewed had produced potatoes in 1950 and, therefore, had experienced the low prices received for that season's crop.

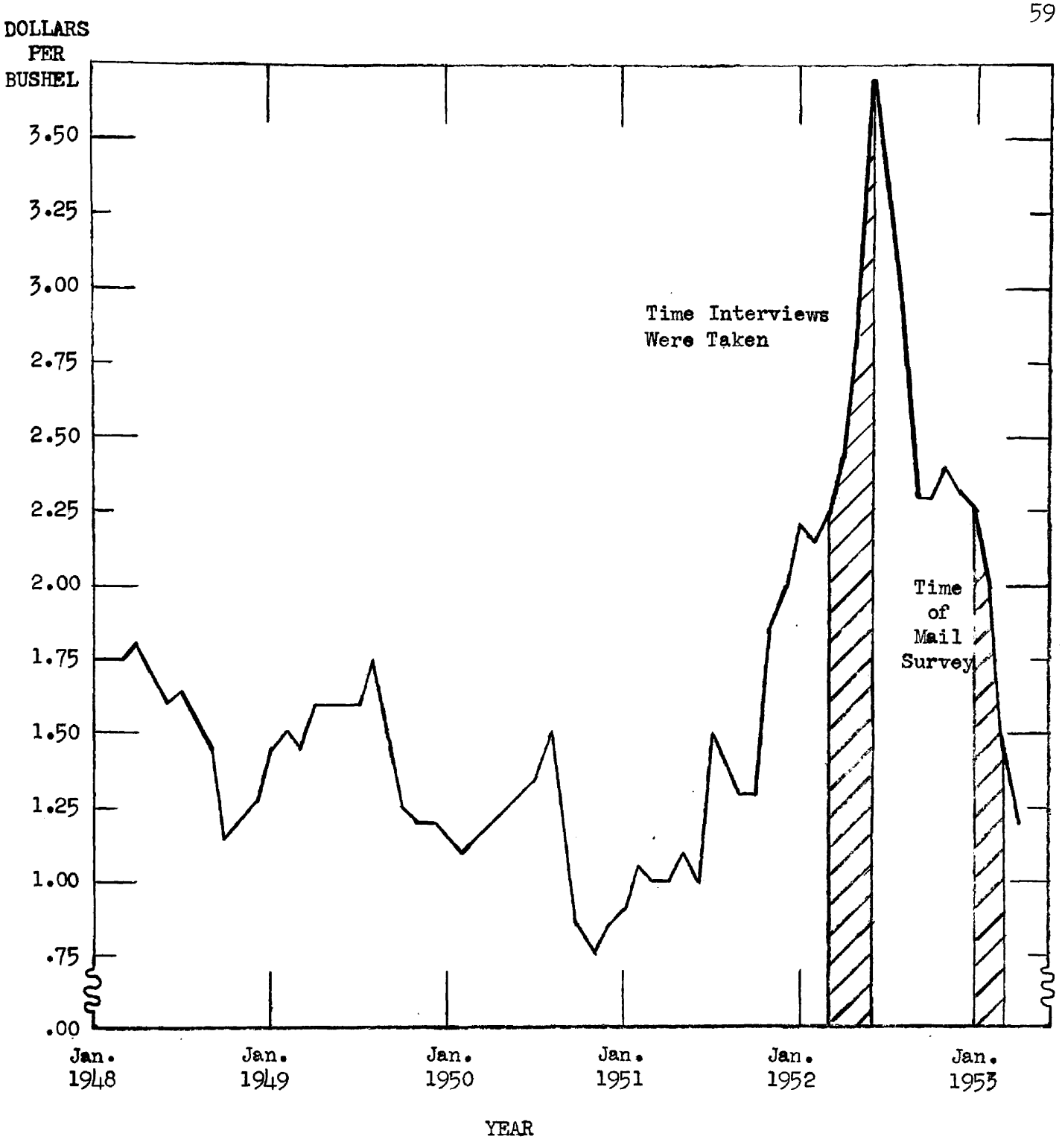
As Ceiling Price Regulation 113 was in effect from January 19 to June 6, 1952, the price of potatoes was under controls during most of the interviewing period. Several potato growers in the Grand Rapids, Michigan, area and one of the growers interviewed in the survey were arrested for selling potatoes above the ceiling price.

Returns from the mail questionnaire were received in January and February, 1953, when the farm price of potatoes in Michigan was falling slightly.

Testing of Results for Sampling Error

It was expected that the sampling procedure would provide a sample which would represent all commercial potato farmers in Michigan. Therefore, the information obtained from the 250 personal interviews and the questionnaires returned was taken to represent the universe of commercial potato farmers in Michigan.

The Chi Square test was used to determine the significance of the results of the sample. In this study, the test was used at the five per cent level of probability in order to prevent the reporting of information which might have been due to chance or sample error. Therefore, the results reported in this thesis could only have been expected to occur as a result of chance or error in sampling in one time out of twenty.



Source: Data from Agricultural Prices, Bureau of Agricultural Economics, United States Department of Agriculture

Figure XI. Michigan Farm Price Per Bushel of Potatoes, January, 1948, to April, 1953

CHAPTER IV

RESPONSES TO THE PROGRAM

Acreage and Yield Trends

A growing demand for potatoes by civilian consumers, for military use, and for lend-lease countries brought on by the beginning of World War II increased the total requirements of potatoes about 50 million bushels above the average production in pre-war years. Because of this increased demand, the Secretary of Agriculture requested an expansion in potato production beginning with the 1943 crop. As an incentive to the grower, the government guaranteed a support price for potatoes of 90 per cent of parity for the crop years 1943 through 1948 and 60 per cent of parity for the 1949 and 1950 crops.

In an attempt to determine growers' acreage and yield responses to the program the following questions were asked:

"Did your potato acreage increase, decrease, or remain the same during the war years (1943, 1944, 1945)?"

"How about yields during these same years?"

"What about since the war, say from 1946 to the present, have you planted more acres? fewer acres? the same?"

"And the yields again, have they increased? decreased? remained about the same? since the war."

In addition, the acreage of potatoes produced by each farmer in 1950 and 1951 was determined along with the intended acreage for 1952. In some instances, the 1952 crop had already been planted.

One-third of the growers in the sample increased their potato acreage during the war years of 1943, 1944, and 1945 (Table 12). Only five per cent decreased their acreage and the remainder maintained their pre-war number of acres. During this same period, forty-four per cent of the growers increased their yields (Table 12). Only one per cent could remember that their yields decreased during the war.

TABLE 12

Growers' Potato Acreage and Yield Trends
During the War Years - 1943, 1944 and 1945

Trend	Acreage		Yield	
	Number*	Per Cent	Number*	Per Cent
Increased	77	33.9	99	43.6
Decreased	11	4.9	2	0.9
No Change	139	61.2	126	55.5
Total	227	100.0	227	100.0

* 23 growers were not raising potatoes during these years.

Acreage trends since 1946 nearly reversed the war-time increases in acreages. Almost half of the growers decreased their acreage since the war (Table 13). As only growers who had three acres or more of potatoes in 1950 were visited, the downward trend in acreage indicated in the survey was undoubtedly much greater. Growers who dropped out of potato production in the late 'forties were not visited.

Yields continued to be increased by more than sixty per cent of the growers following the war. Only a few felt that there had been a decrease in yields per acre since the end of the war.

TABLE 13

Growers' Potato Acreage and Yield Trends Since 1946

Trend	Acreage		Yield	
	Number	Per Cent	Number	Per Cent
Increased	41	16.4	154	61.6
Decreased	114	45.6	11	4.4
No Change	95	38.0	85	34.0
Total	250	100.0	250	100.0

The post-war trend of reduced acreage was accelerated by the removal of price supports following the 1950 crop. Only 11.6 per cent of the growers planted a larger acreage in 1951 than they did in 1950 (Table 14). About 70 per cent planted fewer acres. More than a third intended to increase their 1952 plantings over their 1951 acreage as the 1951 price for potatoes had been very good. In comparing the 1952 intended acreage with the 1950 planted acreages, about 65 per cent of the growers were going to plant smaller numbers of acres in 1952 than in 1950. In 1952, only 17 per cent were going to plant a larger acreage and 18 per cent the same number of acres in 1950.

TABLE 14

Comparison of Acreage Planted to Potatoes in 1950, 1951 and 1952*

Change	1951 compared to 1950		1952 compared to 1951		1952 compared to 1950	
	No.	Pct.	No.	Pct.	No.	Pct.
Increased	29	11.6	94	37.9	42	16.9
Equal	45	18.0	88	35.5	46	18.6
Decreased	176	70.4	66	26.6	160	64.5
Total	250	100.0	248	100.0	248	100.0

* In many cases in 1952, the intention to plant was used in the comparison.

When growers become accustomed to an assured price as they did for potatoes and this guarantee is removed, they apparently become fearful of the forces establishing price in the free market and reduce their acreage. The government apparently did the correct thing in guaranteeing a support price when it needed an expansion in potato production. However, the guarantee remained in effect too long after the expansion in production was no longer required as the demand had decreased and downward adjustments in production were necessary.

There was no association found between the acreage change from 1950 to 1952 and location, size of acreage in 1950, investment in potato equipment, acreage compliance in 1950, use of support program in 1950, production practices, or yield in 1950.

Reasons for Trends

Growers indicated that the principal reason for their war-time expansion in acreage was the fact that the government had requested a larger production. They were given an incentive by the government in the form of an assured price. This reason and others for the increase in war-time acreages are shown in Table 15.

Several of the other reasons--high prices, good cash crop, better marketing outlets, and entered business--are all directly related to the extremely favorable prices received for potatoes during the war years.

TABLE 15

Reasons Given for War and Post-War Potato Acreage Increases

Reason	War-Time		Post-War	
	Number	Per Cent	Number	Per Cent
Government Wanted More Potatoes	35	45.4	1	2.4
Larger Farm or Entered Business	10	13.0	7	17.1
High Prices	9	11.7	6	14.6
Availability of Labor	8	10.4	9	22.0
Good Cash Crop	7	9.1		
Better Marketing Outlets	2	2.6	1	2.4
Rotation Changed	3	3.9	2	4.9
Better Machinery			3	7.3
Other or No Answer	3	3.9	12	29.3
Total	77	100.0	41	100.0

Ten per cent of the farmers indicated that the availability of labor was responsible for their war-time increase. This was also the principal reason given by the farmers who increased their potato acreages following

the war (Table 15). Evidently these farmers had sons who returned to the farm following their war service. A large percentage of the farmers who increased following the war could give no reason for their increase.

Non-availability of labor was the chief reason given by those farmers who decreased their acreage both during and following the war (Table 16). Only five per cent of the farmers stated that the reduced acreage allotments were responsible for their acreage decrease during the post-war years. About an equal number decreased as a form of protest action to the support program. However, fifteen per cent cut down after the supports were removed following the 1950 crop. These growers felt that the production of potatoes was too "risky" without the price guarantee.

TABLE 16

Reasons Given for War and Post-War Potato Acreage Decreases

Reasons	War-Time		Post-War	
	Number	Per Cent	Number	Per Cent
Availability of labor	8	72.7	33	28.9
"Risky" after removal of supports			17	14.9
Higher costs-no money in potatoes			14	12.3
Alternative crops or enterprises			14	12.3
Farmer getting old			8	7.0
Production problems			8	7.0
Allotment cut			6	5.3
Reaction to support income			5	4.4
Other	3	27.3	9	7.9
Total	11	100.0	114	100.0

Yield increases were the result of more and better fertilizer according to slightly less than one-half of the growers. One-fifth stated

improved farm practices or farming methods were largely responsible for their expansion of yields. Twelve per cent felt that more manure or green manure aided greatly in the yield extension. Other reasons given were: change in variety, irrigation, more or better spray or dust, closer planting, better seed, better weather or growing conditions, and better land.

Associations Related to Acreage and Yield Changes

A significant association was found between the location of the grower and the acreage response during the war years. More than one-half of the growers in the Upper Peninsula increased their acreages (Table 17). Only 32 and 29 per cent of the growers, respectively, in Marketing Districts Two and Three increased their acreages.

This relationship is unquestionably linked to the law of comparative advantage. The number of crops that can compete with the potato from a production standpoint in the Upper Peninsula is limited due to soil and temperature conditions. On the other hand, the farmer in the southern part of the state can expand his acreage of wheat and corn. The price of these grains was also supported. Furthermore, the labor requirements involved in the production of an acre of grain is much less than for an acre of potatoes. This is of great importance to the farmer as the opportunities for work off the farm were much greater in the Lower Peninsula.

TABLE 17

Potato Acreage Trends during the War Years - 1943, 1944, and 1945 - by Marketing Districts

Trend	Marketing District					
	One		Two		Three	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Increased	18	52.9	32	31.7	27	29.4
Decreased	0	0	5	5.0	6	6.5
No Change	16	47.1	64	63.3	59	64.1
Total	34	100.0	101	100.0	92	100.0

A significant relationship was also found between those who increased their acreage in the war years and yield during the same period (Table 18). Sixty-six per cent of the growers who increased their acreage also increased their yields. Only thirty-two per cent of those whose acreage remained the same or decreased, increased their yields. These upward trends in yields were obtained through improved production practices, better seed, more fertilizer, and better spraying practices. In addition, closer planting within rows and between rows also aided in the yield per acre increase.

There was an association between location and yield increases during the war years. Sixty-six per cent of the farmers in Marketing District One increased their yields while only one-third of the growers in Marketing District Three increased their yields.

TABLE 18

Potato Yield Trends during the War Years

As Related to War-Time Acreage Trends

Yields	Acreage			
	Increasing		Constant or Decreasing	
	Number	Per Cent	Number	Per Cent
Increasing	51	66.2	48	32.0
Constant or Decreasing	26	33.8	102	68.0
Total	77	100.0	150	100.0

Another interesting association regarding the war-time yields was that 58 per cent of the farmers with 19 years or less of potato growing experience increased their yields as compared with only 44 per cent of the entire group of farmers. Those farmers with fewer years of experience appeared to be more willing to accept new production practices. Furthermore, the number of growers who increased their yields during the war significantly increased their yields in the post-war period as compared with the number of growers whose acreage remained constant or decreased in the war period.

Influence of Competing Enterprises

Competing crops or enterprises have a very noticeable effect on the trend of acreage in potatoes. If the prices of other crops or products are extremely favorable, growers may shift their production plans. All the growers were questioned as to the crops or enterprises that replaced potatoes or were replaced by potatoes.

Grains--wheat, corn, and oats--were the principal crops which replaced the acreage removed from potatoes following the war because 38 per cent of the growers who decreased their potato acreage planted grains (Table 19). These grains continued to receive the benefits of price support following the discontinuation of the potato support program. The support level on the corn and wheat was also at 90 per cent of parity in 1949 and 1950 when the support level for potatoes was at 60 per cent of parity. Hay and pasture were used to replace the decreased potato acreage by one-fourth of the growers. Many growers extended their potato rotation by adding another year of alfalfa or pasture. This practice was another factor in increasing the yield per acre of potatoes.

The largest share of growers that increased their potato acreage did not cut back on other crops. They cleared land, purchased more acres, or used idle land to expand their acreages.

TABLE 19

Crops Increased and Decreased As a

Result of Increases and Decreases in Potato Acreages

Crop	Potato Acreage Decreases		Potato Acreage Increases	
	Number	Per Cent	Number	Per Cent
Grains	43	37.7	21	20.4
Hay and Pasture	28	24.6	21	20.4
Livestock	13	11.4	8	7.8
Vegetables	11	9.6	9	8.7
Sugar Beets and Navy Beans	6	5.3	6	5.8
None	8	7.0	34	33.0
Other	5	4.4	4	3.9
Total	114	100.0	103	100.0

The informants were questioned concerning the crops they might produce if they were to cut down or do away with their potato acreage. Also, each was asked the following questions, "From the standpoint of cash returns, your soil, climate, and crop system, are these fairly good alternatives to growing potatoes?" and "What is it that makes you prefer to stick to potatoes?"

The principal alternates suggested for potatoes were small grains like oats and rye (Table 20). Oats are commonly used in the rotation for potatoes. Hay was suggested by a large number of producers. Both the small grains and hay were rated as a poor alternate to potatoes by the farmers. Livestock including dairy animals was mentioned as a good alternate in the largest number of instances. However, at the time of the survey the prices of milk, milk products, and meat animals were very favorable.

TABLE 20

Alternative Crops or Enterprises Suggested by Farmers as Replacing Potatoes

Crop or Enterprise	Good Alternate		Poor Alternate		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
Small grain (oats and rye)	21	12.9	15	19.7	36	15.1
Livestock (dairy)	30	18.4	5	6.6	35	14.6
Hay and pasture	17	10.4	15	19.7	32	13.4
Corn	20	12.3	11	14.5	31	13.0
Livestock (other)	19	11.7	9	11.9	28	11.7
Vegetables and berries	21	12.9	3	3.9	24	10.0
Sugar beets and dry beans	15	9.2	7	9.2	22	9.2
Wheat	11	6.7	4	5.3	15	6.3
Other	9	5.5	7	9.2	16	6.7
Total	163	100.0	76	100.0	239	100.0

There was an indication that vegetables and berries - truck crop specialities - would be favorable alternates to potatoes. The marketing outlets for the truck crops might be somewhat similar to those for potatoes. In addition, some of the equipment required for potatoes could also be used in truck crop production.

Slightly less than one-half of the growers stated that they preferred to raise potatoes because they were a good cash crop which showed more profit than could be received from some other crops (Table 21). About one-fifth of the growers had a personal preference for potatoes, knew the business, and liked to grow potatoes. Growers also thought that potatoes were good for the land. As the potato is cultivated, its production helps to clear the land. A group of growers who had an investment in the business in the form of equipment and storage facilities naturally desired to produce potatoes. Several growers indicated that they did not prefer potatoes and were not continuing to raise potatoes.

TABLE 21

Reasons Given for Raising Potatoes

Reasons	Number	Per Cent
Good cash crop	112	44.8
Personal preference	46	18.4
Good for the land	22	8.8
Investment in business	22	8.8
Like to diversify	13	5.2
Soil adapted to potatoes	8	3.2
Other	5	2.0
Don't prefer	22	8.8
Total	250	100.0

Compliance with Acreage Allotments in 1950

Individual farm allotments applied to commercial potato farms or those having three acres or more of potatoes. Restrictive acreage goals started with the 1946 crop, and individual farm goals and compliance therewith were conditions of eligibility for price support beginning in 1947 and continuing through the 1950 crop. The government requested a seven per cent reduction in potato acreage in 1950 from the 1949 planted acreage.

Each grower was asked what his acreage allotment had been in 1950. Then the 1950 planted acreage indicated in a previous question was compared with the acreage allotment to determine whether he had complied with the allotment. None of the growers stated that they had not received an allotment but 13 per cent had forgotten the number of acres in their allotment.

About three-fourths of the respondents had complied with their allotment (Table 22). Fifteen per cent did not comply. Only one-fifth of the growers indicated that they had intentionally complied with their acreage allotments. These growers might have planted a larger acreage if compliance with the allotments had not been a requirement to receiving the benefits of government support.

These reasons would indicate that a great majority of the growers did not change their production plans as a result of acreage allotments. Growers were either specific by stating that the allotment was greater than their needs, or they wouldn't have planted any more, or the allotment happened to fit into their rotation plans.

TABLE 22

Compliance of Growers with Acreage Allotments in 1950 and Reasons

Compliance and Reasons	No.	Pct.	No.	Pct.
Complied	181	72.4		
Allotment greater than need			41	16.4
Wanted supports - wouldn't have planted more			42	16.8
Fitted in with rotation			47	18.8
Wanted support - would have planted more			51	20.4
Didn't comply	37	14.8		
Didn't pay any attention			10	4.0
Didn't fit into rotation			15	6.0
Other			12	4.8
Didn't remember allotment	32	12.8	32	12.8
Total	250	100.0	250	100.0

The principal reason given for not complying was that the allotment was too small for the particular piece of ground that was ready for potatoes and thus would interfere with the rotation plan. In addition, several growers didn't pay attention to their allotments as they were violently opposed to the program.

This information regarding acreage compliance by potato growers is very similar to that found in the earlier study in Michigan which was reported in Chapter Two. In the previous sample, 68 per cent of the potato growers complied with their 1950 acreage allotments and 32 per cent did not. It was further indicated that the reason given for non-compliance by 50 per cent of the growers was that the allotment interfered

with farm management practices, and according to 58 per cent of those growers complying with their allotments compliance was a coincidence.[1]

Significant association was found between the acreage compliance and the location of the producer. Eighty-three per cent of the farmers in the Upper Peninsula complied while only sixty per cent of the growers in Marketing District Three planted within their acreage allotment (Table 23). There was no association between acreage compliance and the age of the farmer, size of potato acreage, year started farming, investment in potato equipment, potato production practices, yield, or membership in a farm organization.

TABLE 23

Compliance with Acreage Allotments

in 1950 by Marketing Districts

Compliance	Marketing District					
	One		Two		Three	
	No.	Pct.	No.	Pct.	No.	Pct.
Complied	30	83.3	90	79.7	61	60.4
Didn't comply	4	11.1	11	9.7	22	21.8
Didn't know	2	5.6	12	10.6	18	17.8
Total	36	100.0	113	100.0	101	100.0

[1] Dale E. Hathaway, and E. E. Peterson, Michigan Farmers and the Price Support Program. I. Farming Under Price Supports, Michigan Agricultural Experiment Station, East Lansing, Michigan, Technical Bulletin 234, 1952, pp. 18-20.

The Use of Price Support Program in 1950

The 1950 crop of potatoes produced another surplus as yields per acre continued high. From this crop the government purchased about 100,000,000 bushels in the United States at a cost of 65 million dollars. In Michigan, 3,806,000 bushels were purchased through support operations at a cost of $2,664,000.

To be eligible for the support benefits, growers had to stay within their acreage allotments, to pay a nominal service fee of about $3.00 per alloted acre, and to comply with marketing regulations issued under marketing orders. The service fee was determined by multiplying the number of acres alloted to the farm by one cent for each hundredweight of the county's normal yield per acre. The United States average farm support price for the season was $1.01 per bushel and was designed to insure price support at 60 per cent of parity. The same support price was paid for U.S. No. 1, U.S. Commercial and U.S. No. 2 potatoes. Previous to the 1949 program, discounts were applied to potatoes grading lower than U.S. No. 1. As a result the lower grade potatoes had been marketed, and the better grades were sold for government disposal. The purpose of the uniform rate was to encourage the commercial marketing of better grade potatoes and to encourage the lower grades to enter the price support program.

In Michigan the support price of the 1950 crop increased from $1.45 per hundredweight of $1.87 per bushel at the rate of ten cents per hundredweight or six cents per bushel each month from October, 1950, through February, 1951. The last increase from February to March, 1951 was five cents per hundredweight or three cents per bushel. The support price for

U.S. No. 1, Size B, Grade (1½ to 2 inches in diameter) was $1.00 per hundredweight or $.60 per bushel for the entire season in Michigan. The average farm price for Michigan potatoes in 1950 remained below the support price for most of the marketing season (Table 24). The season's average weighted price for the 1950 crop was 98 cents per bushel or three cents below the support price. The early potatoes produced in the state were sold at relatively favorable prices. When the bulk of the potato crop was harvested, the farm price fell below the support price. In November the support price was $.18 per bushel above the farm price.

One-half of the growers interviewed sold all or part of their 1950 potato crop to the government (Table 25). There was a very significant association between the location of the grower and his use of the programs. Approximately 70 per cent of the growers in Marketing District One (the Upper Peninsula) sold part or all of their crop to the government. In the area close to the consuming market, Marketing District Three, only 27 per cent used the program.

Another interesting relationship shown in Table 25 is the high proportion of growers in Marketing District Two (upper part of the Lower Peninsula) that sold their entire crop to the government. In addition, only two growers in District Three disposed of all their potatoes through government channels.

There are various reasons for these two observations. Producers nearer the center of population have many more available outlets. The support price was uniform throughout Michigan regardless of location. Thus a support price of $.87 per bushel was relatively more favorable to a grower in Presque Isle or Houghton counties than to a grower in Cass county because of high transportation charges involved in moving the

TABLE 24

Farm Price per Bushel Compared to Support Price for Michigan Potatoes by Months during the 1950 Marketing Season

Month	Farm Price[1]	Support Price[2]	Difference
July	$1.35	$ .87	$.48 +
August	1.50	.87	.63 +
September	1.20	.87	.33 +
October	.85	.87	.02 -
November	.75	.93	.18 -
December	.85	.99	.14 -
January	.90	1.05	.15 -
February	1.05	1.11	.06 -
March	1.00	1.14	.14 -
April	1.00	1.14	.14 -
May	1.10	1.14	.04 -
1950 Crop	$ .98[3]	$1.01	$.03 -

[1] Michigan Crop Reporting Service.

[2] P.M.A. news release of 1950 support programs - February 1, 1950.

[3] Season Average Price Weighted.

TABLE 25

Number of Growers Selling Potatoes through 1950 Price Support Program by Marketing Districts

Portion of Crop Sold to the Government	Marketing Districts						State	
	One		Two		Three			
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Part of crop	15	41.7	28	24.8	25	24.7	68	27.2
Entire crop	10	27.8	45	39.8	2	2.0	57	22.8
Total using program	25	69.5	73	64.6	27	26.7	125	50.0
None of crop	11	30.5	40	35.4	74	73.3	125	50.0
Total	36	100.0	113	100.0	101	100.0	250	100.0

potatoes to market. The farm price received for potatoes in southern Michigan is higher than that received in northern Michigan. Actually the growers in northern areas of the state were benefiting from the fact that the average Michigan price was raised by the potatoes produced in southern Michigan. The support price was $.15 per hundredweight higher in the Upper Peninsula of Michigan than in Wisconsin. Most of the growers of Bay County, a section of District Three in which early potatoes are produced, did not use the program because the farm price of potatoes marketed from June through September was much higher than the support price.

Furthermore, the southern grower undoubtedly found outlets for his lower grade potatoes. It was impossible to enforce the marketing order regulations completely. Certainly this task would have been much greater

in the southern area with its many market outlets and highways. Therefore, these growers found other outlets rather than the government for their No. 2 grade potatoes. Since the producers in Marketing District Three were able legally to sell lower grade potatoes, they would have fewer potatoes to sell to the government.

The fact that so large a number of District Two growers sold their entire crop to the government might be explained by the fact that the Michigan Potato Growers Exchange, a growers' marketing co-operative, had been quite active in this area in previous years. During the support operations of our government, this co-operative was said to encourage members who were eligible for support to sell their potatoes to the government. The Exchange then attempted to sell in the open market the potatoes of members who were not covered by the support feature. This same system was used by most of the country dealers, and country dealers are now the main outlet for potatoes produced in this area. Therefore, the system whereby eligible growers sold their entire crop to the government and the potatoes of those not qualified for support were sold on the open market was quite universal in this area. The growers in the Upper Peninsula apparently had a larger number of established outlets for their potatoes. Furthermore, they had a desire to maintain these markets. The No. 2 grade potatoes were probably sold to the government rather than sold illegally.

Another association was found between the use of the program and the type of farm (Table 26). A larger proportion of the livestock farmers used the program than did the crop or part-time farmers. A much lower

TABLE 26

Use of Potato Support Program in 1950 by Type of Farmer

Sold	Type of farmer							
	Crop		Livestock		General		Part-time	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Part of crop to gov't.	27	36.5	22	28.6	18	20.9	1	7.7
Entire crop to gov't.	3	4.1	25	32.4	27	31.4	2	15.4
Total selling to gov't.	30	40.6	47	61.0	45	52.3	3	23.1
None to gov't.	44	59.4	30	39.0	41	47.7	10	76.9
Total	74	100.0	77	100.0	86	100.0	13	100.0

per cent of the crop farmers sold their entire crop to the government than did the livestock and general farmers. The crop farmer probably specialized in truck crops and potatoes and desired to maintain his established markets and outlets. Those crop farmers selling to the government undoubtedly disposed of their lower grade potatoes in this way. Livestock and general farmers with fewer established outlets were forced in many instances to rely on the government, because there were no other outlets. In addition, these farmers had livestock to which they could feed the surplus potatoes. The government allowed farmers to buy back for one cent per hundredweight potatoes, which provided very inexpensive cattle feed. In addition, the bag containing the potatoes could be resold for six to seven cents. The farmer actually gained both from the value of the bag and the value of the cattle feed.

The feeding of potatoes to livestock was not a new feature resulting from the price support program. For some time farmers have fed low grade potatoes to cattle, hogs, and sheep. However, potatoes sold by the government for livestock feed would not be competing with or replacing the merchantable grades in the table stock channels of trade.[2]

Relationship was found between those farmers who had a yield of 200 bushels or below and the use of the program. This fact probably is tied in with the factors of location and time of marketing. Of the 29 growers with an average yield of 200 bushels or below, the ratio was one grower using the program to two not using the program. Here again the yields of early potatoes in the Bay County area are usually relatively lower than the remainder of the state. The price received by these growers was above the support figure. Another reason for this association might be that the farmer with the low yields had only enough potatoes to satisfy his established markets and, therefore, did not have a surplus to sell to the government. Furthermore, the failure to take advantage of the price supporting activities of the government may be an indication, in addition to low yields, that the farmer was an inefficient manager.

An association was evident between the use of the program and those farmers harvesting more than 20 acres of potatoes. In this category the

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[2] According to results reported in the United States Department of Agriculture (P.M.A.) Misc. Pub. 676, potatoes are worth about one-fifth to one-fourth as much as an average grain mixture when fed in well-balanced rations. Cooked potatoes may be of greater relative feed value for feeding swine. In terms of nutrients it is further indicated that potatoes are about equal in feed value to good corn silage or one-third the feed value of alfalfa hay.

proportion of farmers who sold potatoes to the government was about the same as those in the entire sample. However, only four farmers of the 55 farmers or about seven per cent with 20 acres or more sold their entire crop to the government. This compares with 23 per cent of the entire sample that sold their entire crop to the government. These farmers with their large acreages undoubtedly had established outlets for their potatoes and they wanted to maintain them. In addition there could have been the problem of storing a large crop. The buying machinery of the government was rather slow. Thus these farmers had to sell some potatoes in the fall before they could be sold to the Department of Agriculture because storage was not available for the huge supplies.

There was no association between use of the program and the age of the farmer, year started farming, size of farm, investment in potato equipment, potato production practices, proportion of the total productive man units in potatoes, and membership in farm organizations.

In response to the question as to why the growers sold any potatoes to the government, the main reasons given by about the same number of growers were that there was no other outlet, the support price was above the market price, and the No. 2 grade potatoes were sold to the government (Table 27). Under provisions of the marketing order, it was not legal to sell the No. 2 grade on the open market. Eligible growers took advantage of this outlet to sell their lower grades.

Two-thirds of the growers in Marketing District Three stated they used the program as a means of disposing of their No. 2 grade potatoes. These men apparently attempted to abide by the government regulations. As only two per cent of the growers in this area sold their entire crop to the government and the majority that used the program did so in order to obtain

something for the lower grades, evidently there were sufficient available outlets and the support price must have been above the market price in this area.

TABLE 27

Reasons Given for Using the Potato Price Support Program in 1950

Reason	Number	Per Cent
No other outlet available	44	35.2
Support price above market price	36	28.8
No. 2 grade was sold to government	36	28.8
Had paid fees, so wanted the insurance	9	7.2
Total	125	100.0

Those growers who sold part of their crop to the government were asked why they hadn't sold their entire crop to the Department of Agriculture. More than 40 per cent of these farmers stated that the market price for U.S. No. 1's was above the support price (Table 28). The other principal answers were that they had regular customers to supply, that the government machinery moved too slowly, and that they needed the money right away.

In Marketing District Three approximately three-fourths of the producers who sold part of their crop to the government stated that they had not used this outlet to a greater extent because the market price for Grade No. 1 was above the support price. None of those in Marketing District One gave this reason for not selling their entire crop

TABLE 28

Reasons Given for Not Selling the Entire

1950 Potato Crop to the Government

Reason	Number	Per Cent
Market price for No. 1 above support	29	42.6
Had regular customers to supply	12	17.6
Needed money right away	10	14.7
Gov't machinery moved too slowly	8	11.8
Lack of storage space for support	4	5.9
Other	5	7.4
Total	68	100.0

to the government. One-third of the latter group stated that they had regular customers to supply.

These reasons why the growers used the program or why they did not make more use of it indicate that the market price in Marketing District Three was undoubtedly higher than the support price while the opposite condition was true in the Upper Peninsula. In this fact may lie the reason behind the attitudes of the grower toward the price support program. As there was less need for the program in Marketing District Three, the growers were opposed to it. In the Upper Peninsula the support price increased the price to the farmer and therefore he had a favorable attitude toward the operation of the 1950 support program.

Growers' Response to 1950 and 1951 Marketing Orders Referendums

Michigan commercial potato producers, along with growers in North Dakota, Minnesota, Wisconsin, Michigan, and the commercial potato producing counties of Iowa and Indiana, were given the opportunity to vote on a proposed amended federal marketing order. The amendments to the order, which was in effect since 1942 and in operation since 1947, provided for more flexible operation of the order and for expansion of the existing production area to include the several counties in Iowa and Indiana. In order to receive price support for the 1950 crop, growers had to approve the issuance of the proposed amended order.

Under the Agricultural Marketing Act of 1937, as amended, it was necessary before amendments to a marketing order could be made effective to have the approval by (1) two-thirds of the growers voting in a referendum, or (2) growers representing two-thirds of the production voting in a referendum. Growers were required to state the number of hundredweight produced in 1949 and the number of acres of potatoes produced in 1949, to indicate their vote on the order, and to sign their names and addresses. Certainly this was not a very secret vote and might account for the low percentage of growers who actually voted.

Results of the referendum conducted in the six states indicated that 75.3 per cent of the 5,557 growers voting approved the order. By volume of production, 72 per cent favored the issuance of the order.[3] According to the P.M.A. there were about 6,000 growers in Michigan eligible to vote in the referendum.

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[3] P.M.A. News Release, USDA 2432-50, October 6, 1950.

Those figures would indicate that the producers with the larger production were more opposed to the order than the farmers with small acreages. A breakdown was never given concerning the tabulation by states nor was it made available to interested persons. Much criticism surrounded the referendum as those opposed to the order were not given the opportunity to aid in counting the ballots. There were charges that the order was forced on the growers by employees of the Department of Agriculture.

Judging from the response of the growers in the survey concerning their vote in the 1950 referendum, it would appear that perhaps the growers of Michigan did have a marketing order forced on them either through the efforts of the P.M.A. employees or by the growers in the other states which were affected by the order. Of those growers in the survey voting in the 1950 referendum only 52 per cent favored the order and 48 per cent were opposed (Table 29). However, approximately 40 per cent of the growers were not interested enough to vote and eight per cent didn't remember how they voted.

There was a significant relationship between the distance from the larger commercial markets and the support of the order. Eighty-eight per cent of the producers in Marketing District One, 59 per cent in District Two, and 26 per cent in District Three voted in favor of the order (Table 29). This fact is very closely related to the one characteristic which was common to all the industries in which marketing order programs for fruits and vegetables were in effect during 1952. The distance over which the commodity was shipped to the principal consuming markets in each case was relatively long.

TABLE 29

How Growers Voted in 1950 Marketing Order Referendum by Marketing Districts

Vote	Marketing District						State	
	One		Two		Three			
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
For order	15	88	41	59	12	26	68	52
Against order	2	12	28	41	34	74	64	48
Voting in referendum	17	100	69	100	46	100	132	100
Didn't vote	18		34		46		98	
Didn't remember	1		10		9		20	
Total	36		113		101		250	

A marketing order which provides for limitations of grade and size on the sale of potatoes has less effect on the producers located a distance from the central markets. This is explained by the fact that in the further areas from the terminal markets the better qualities of potatoes are higher prices relative to the poorer grades. For example, if grade No. 1 potatoes are $2.00 per bushel and grade No. 2 potatoes are $1.50 in the terminal market and the transportation cost of $.50 per bushel from the distant area is the same for each grade, then the price at the shipping point will be $1.50 per bushel for grade No. 1 and $1.00 for grade No. 2. At the country point located, for instance, in the Upper Peninsula of Michigan the higher grade is 50 per cent above the lower grade while at the central market the better grade is one-third higher. Thus, it is more economical to ship the better grades to the market and to use the lower

grades in the producing areas. This relative price differential of different grades decreases as one moves closer to the centers of population.

TABLE 30

Comparison of 1950 Vote on Marketing Order and Use of Support Program

Vote on marketing order	Didn't sell to govt.		Sold part of crop to govt.		Sold entire crop to govt.	
	No.	Pct.	No.	Pct.	No.	Pct.
Yes	15	13	22	34	31	58
No	36	32	19	30	9	17
Didn't vote	62	55	23	36	13	25
Total	113	100	64	100	53	100

There was an association between the way the farmers voted on the 1950 marketing order and their use of the price support program (Table 30). Approximately 60 per cent of the growers selling their entire crop to the government voted for marketing orders. Their affirmative vote was probably influenced more by their desire to receive price support than by their approval of the principle of marketing orders. The largest percentage of those not selling to the government didn't have interest enough to vote either way in the 1950 referendum. These growers evidently were not interested in the principle of the order or in price supports. However, among this group that did vote, over two to one were opposed to the marketing order when it was tied to price supports. Those that sold

part of their crop to the government had a neutral attitude with a few more favoring the order than opposed it.

Statistical significance was also discovered between the growers' voting record and several allied factors (Table 31). The final results of referendum released by the Department showed that a slightly higher percentage of the volume of production than the number of growers voting in 1950 was opposed to the order. In Michigan the growers with acreages of 20 acres or more of potatoes in 1950 were more opposed to the order than those with less than 10 acres. In addition, the per cent of growers not voting among those with the larger acreage was 28 per cent compared to 53 per cent of those growers with less than 10 acres. As the marketing order regulated only those producers who also were handlers or shippers of potatoes, the growers who sold to a county dealer were not in close contact with the order. Thus they were less interested in its operation.

TABLE 31

Comparison of 1950 Vote with Various Factors

Showing Significance

Group	Yes		No		Didn't vote		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Entire Group*	68	30	64	28	98	42	230*	100
Less than 10 A. of potatoes in 1950	31	30	18	17	55	53	104	100
More than 20 A. of potatoes in 1950	14	26	25	46	15	28	54	100
Excellent production practices	20	28	29	40	23	32	72	100
Investment over $3,000 in potato equipment	10	23	21	49	12	28	43	100

* 20 growers didn't remember how they voted.

Those growers conducting excellent production practices and those having investments of over $3,000 in potato equipment were more opposed to the order as it was tied to price supports than was the average grower. These facts indicate that these growers were willing to take their chances as to price in the free market. Furthermore, they didn't approve of the interference in their marketing program by the government and its employees. There was no association between the 1950 vote and age, year started farming, type of farm, yield, or percentage of total productive man-work units contributed by potatoes.

Under the terms of the marketing order, regulations were placed in effect November 27, 1950, which applied to the shipments of potatoes from the area. The minimum size for round varieties was 2 inches and for long varieties 1-3/4 inches. Washed potatoes had to grade U.S. No. 2 and contain at least 30 per cent of U.S. No. 1 potatoes. For unwashed potatoes different rules applied in Marketing Districts One and Two as compared to Three. This fact also created criticism from some Michigan areas. Unwashed potatoes from District One and Two were required to grade U.S. commercial, 85 per cent U.S. No. 1 or better, while unwashed potatoes from District Three had to grade U.S. No. 2, 65 per cent U.S. No. 1 or better. These regulations favored the grower in southern Michigan.

It was hoped that through these regulations about 15 per cent of the 1950 crop from the North Central states would be held off the market. Because the northern part of the six-state area had more high quality potatoes in 1950, it was decided by the North Central Potato Committee to divide the area into two zones, and to establish one set of size and quality regulations for the northern zone and a slightly different set for the southern zone.

The growers had another opportunity to vote on the order during the period July 9-13, 1951. Price supports were no longer tied to the marketing order as Congress had previously failed to provide the means for price support. The Department of Agriculture reported that of those voting in the 1951 referendum, 62.6 per cent of the growers and 78.1 per cent of the production favored termination of the order. Only 14 per cent of the commercial potato growers in the production area participated in the referendum. These growers produced about 35 per cent of the crop.[4] These results indicate that the growers with the larger acreage of potatoes were again the ones most opposed to the order. Furthermore, the growers with the larger acreages were much more concerned with the order and were determined to defeat it. According to the Agricultural Marketing Act of 1937, the Secretary of Agriculture is required to terminate an order if a majority of the total number of growers in the area covered by such order, who marketed over 50 per cent of the potatoes produced in the area, favor termination. Despite the fact that only 14 per cent of the growers voted or many less than the majority of the growers in the area, the Secretary of Agriculture terminated the order on the basis that it no longer carried out the purposes of the Agricultural Marketing Agreement Act.

Evidently the Michigan growers were more concerned with the order than were the growers in the other states. In the 1951 referendum, 38.8 per cent of the growers stated that they had voted. Of those voting, 71 per cent favored discontinuance of the federal order (Table 32).

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[4] P.M.A. News release, USDA 1858-51, July 30, 1951.

TABLE 32

How Growers Voted in 1951 Marketing Order Referendum

by Marketing Districts

Vote	Marketing District							
	One		Two		Three		State	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
For order	4	36	18	38	6	16	28	29
Against order	7	64	30	62	32	84	69	71
Total voting	11	100	48	100	38	100	97	100
Didn't vote	24		56		53		133	
Don't remember	1		9		10		20	
Total	36		113		101		250	

About 90 per cent of the growers that voted for the 1951 marketing order when it was not associated with supports also voted for it in 1950 (Table 33). These growers were definitely in favor of the marketing order principle. However, over one-fifth of the negative votes in 1951 supported the order in 1950. These growers were probably more in favor of supports than the order. Another interesting observation found in Table 33 is that those growers who did not vote in 1951 but did in 1950 approved the plan by a two to one vote. More than one-third of the total number of farmers didn't vote in either referendum.

TABLE 33

Comparison of the 1951 Vote on Marketing Order with the 1950 Vote

1950 Vote	1951 Vote					
	Yes		No		Didn't Vote	
	No.	Pct.	No.	Pct.	No.	Pct.
Yes	24	89	16	21	28	22
No	1	4	51	68	12	9
Didn't Vote	2	7	8	11	88	69
Total	27	100	75	100	128	100

Statistical significance was found between the 1951 vote and several other factors, all of which indicate a degree of consistency of the results. Slightly over 70 per cent of those farmers for which potatoes made up less than 10 per cent of their total productive man-work units in 1951 and of those farmers who planted less than 10 acres of potatoes in 1950 did not vote in the 1951 referendum (Table 34). Of the total sample, 58 per cent did not participate in the referendum. Although all commercial potato growers could vote, it was evident that those for which potatoes were not a large part of the farm operation had no interest in federal marketing programs that would only affect them slightly.

On the other hand, of those growers for which potatoes represented more than 30 per cent of their total productive man-work units, 50 per cent voted against the marketing order, 9 per cent voted for the order, and 41 per cent did not return their ballot (Table 34). These growers realized that their potato marketing program could be affected very greatly by the operation of the marketing order.

TABLE 34

Comparison of 1951 Vote with Various Factors

Showing Significance

Factor	Yes		No		Didn't vote		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Entire group	28	12	69	30	133	58	230*	100
Potatoes less than 10 pct. of total P.M.U.'s in 1951	9	10	16	18	63	72	88	100
Less than 10 acres of potatoes in 1950	14	14	15	15	73	71	102	100
Potatoes more than 30 pct. of total P.M.U.'s	3	9	16	50	13	41	32	100
More than 20 acres of potatoes in 1950	5	9	32	60	17	31	54	100
Crop Farmers	6	9	30	43	33	48	69	100
Excellent production practices	6	9	31	44	33	47	70	100
Investment over $1,500 in potato equipment	6	8	35	47	34	45	75	100

* 20 growers didn't remember how they voted.

Crop farmers, farmers with the best production practices, farmers with 20 acres or more of potatoes, and farmers with over $1,500 invested in potato equipment - as groups - voted against the marketing order in 1951. However, a large proportion of these farmers didn't vote. Evidently they felt that there was enough opposition to the order to defeat the proposal. These growers apparently did not approve the interference by the government in their marketing program. Furthermore, they wanted to make the decision regarding the sale of lower grade potatoes. As each grower was required under the marketing order to have federal inspection of his potatoes, the annual cost of the inspection was probably substantial for those selling large quantities of potatoes.

The grower with the larger potato operation probably conformed with the marketing regulations of the federal order to a greater extent than did other farmers. This was because the producer with the largest potato production probably had a greater knowledge of the existence of the order. He also had a greater reputation in the potato field to maintain. In addition, the producer with the larger acreage was more likely to handle his own potatoes and therefore be subject to the regulations of the order.

As might be expected, there was a very high degree of significance between the attitude towards the marketing order as it operated in 1950 and the vote in 1951. Those that favored the method of operation in 1950 voted for the continuation of it. Also, those that supported the order in 1951 were significantly more in favor of supporting the order in 1952 even if it were tied to supports. Thus it can readily be seen that the philosophy of marketing orders has become embedded in the minds of some growers. These growers were very consistent in supporting the order regardless of its connection with price support. However, as these growers were in the definite minority, it is highly unlikely that a marketing order for potatoes will be used in the near future in Michigan unless it is forced on them by the vote of growers in other states or overly ambitious federal employees. It is very doubtful that even adverse economic conditions would bring the potato producers located in the lower peninsula of Michigan to approve a marketing order. Many are in a position to receive at the farm about the same relative price for the various grades that exist in the terminal market, and enforcement of an order is practically impossible in areas close to the consuming market.

Changes in Production Practices on Removal of Supports

During the political attack on the potato support programs, the opponents charged that potato producers were guilty of increasing the yield per acre of potatoes. As a result of reduced acreage allotments, growers were said to be maintaining total production on the smaller number of acres by using more fertilizer, better seed, and more seed to the acre in planting closer between and within the rows. If this accusation was right, it might have been expected that growers would decrease the intensity of their production practices with the removal of price supports. In an attempt to compare the growers' practices during the priod of price support with those following the discontinuation of price support, each grower was questioned as to the degree of certification of seed, the rate of fertilization, and the seed rate per acre for the years 1950, 1951, and 1952.

The degree of certification of the seed used in 1952 was definitely below that for the years 1950 and 1951 (Table 35). However, the number of growers using certified seed in 1951 was about equal to the number using it in 1950. The removal of supports in 1950 didn't appear to cause growers to plant poorer seed in 1951. The principal reason for the decline in the use of certified seed in 1952 was the fact that seed prices were excessive and that seed was scarce at the time of planting in 1952. Growers did not have the money to invest in better seed. As a result they used as seed some of their potatoes from the previous year.

TABLE 35

Degree of Seed Certification for 1950, 1951 and 1952 Potato Crops by Number and Per Cent of Growers

Majority of seed	1950		1951		1952	
	No.	Pct.	No.	Pct.	No.	Pct.
Certified	71	28.4	60	25.6	39	16.9
One year from certification	80	32.0	87	37.2	70	30.3
Over one year	99	39.6	87	37.2	122	52.8
Total	250	100.0	234	100.0	231	100.0

Potato specialists at Michigan State College recommend that on good soil growers should plant 20 bushels or more seed per acre.[5] About one-fourth of the growers planted or expected to use from 20 to 22 bushels of seed per acre in 1952. One-third used more than 22 bushels and 39 per cent planted less than 20 bushels. When the seed rate for 1951 was compared with that used in 1950, it was discovered that most of the growers maintained their seed rate when supports were removed. In 1951 there were 17 per cent of the producers that increased and six per cent that decreased their 1950 rate of seed application (Table 36). For the planting of the 1952 crop 11 per cent increased and 15 per cent decreased their 1951 quantity of seed planted per acre. These results indicate a slackening in the trend toward increasing the quantity of seed planted per acre. This fact is also apparent when comparing the 1952 and 1950 information. While approximately the same percentage of growers increased their 1952 rate of seed application from 1950 as compared to the percentage that

[5] H. C. Moore, "Better Potatoes for Michigan", Michigan State College Extension Bulletin 49, E. Lansing, 1949, p. 11.

increased in 1951, there was a larger percentage that decreased their application than between 1950 and 1951. It is highly possible that some of these growers may have reached the point of diminishing returns relative to the quantity of seed planted per acre.

TABLE 36

Comparison of Quantities of Seed Applied per Acre, 1950, 1951, and 1952 Crops

Comparison	1951 compared to 1950		1952 compared 1951		1952 compared to 1950	
	No.	Pct.	No.	Pct.	No.	Pct.
Greater	41	17.4	24	10.7	40	17.7
Equal	181	76.7	168	74.3	160	70.8
Smaller	14	5.9	34	15.0	26	11.5
Total	236	100.0	226	100.0	226	100.0

The fertilizer recommendation of Michigan State College is to "apply 600 to 1,000 pounds of commercial fertilizer per acre on good soils well supplied with organic matter".[6] Slightly more than one-third of the growers planting potatoes in 1952 expected to use the quantity suggested. About one-half of the producers planned to use below 600 pounds and only 14 per cent were to apply larger amounts than 1,000 pounds. Most of the growers continued to apply the same quantities of fertilizer throughout 1951 and 1952 as they did in 1950 (Table 37). However, there was a smaller

[6] Ibid., p. 5.

percentage that increased and a larger percentage that decreased their rate of fertilizer application from 1951 to 1952 than did from 1950 to 1951. Similar results regarding changes in the rates of fertilizer application between the 1950, 1951, and 1952 crops were found as prevailed for seed use.

TABLE 37

Comparison of Quantities of Fertilizer Applied per Acre, 1950, 1951, and 1952 Crops

Comparison	1951 compared to 1950		1952 compared to 1951		1952 compared to 1950	
	No.	Pct.	No.	Pct.	No.	Pct.
Greater	49	20.8	29	12.8	65	28.7
Equal	167	70.8	153	67.7	137	60.6
Smaller	20	8.4	44	19.5	24	10.7
Total	236	100.0	226	100.0	226	100.0

This information indicates that after removal of price supports the large majority of growers continued to apply the same quantities of seed and fertilizer per acre and to use the same quality of seed. However, for the 1952 crop there was an appreciable reduction in the quality of the seed used and a slight reduction in the 1950 rates of seed and fertilizer application per acre.

The only significant association was found between those that increased their rates of fertilization and seed between 1950 and 1952. While only 18 per cent of all the growers increased the quantity of seed used per acre,

34 per cent of those growers who increased their application of fertilizer also increased their seed rate.

The interviewees were asked if they would change their rate of fertilization application and the number of sprays if they were assured of the price that they predicted for the next season's crop. Over 86 per cent of the growers replied in both instances that the guaranteed price would not alter the amount of fertilizer they would use or the number of sprays that would be applied. Approximately equal percentages of the others said they would lower or raise their applications. When asked if the support price equivalent to 90 per cent of parity would change their plans, growers' answers were practically unchanged. The producers felt that regardless of the guaranteed price they did the best they knew or were accustomed to doing in order to produce a satisfactory crop of potatoes.

Implications for Policy

The original aim of the price support program for potatoes was to encourage increased production. Many growers did expand their acreages and increase their yields during the war years or the beginning of the support program. Slightly less than one-half of the growers increasing their acreage did so because the government desired more potatoes and provided an incentive to the grower.

Growers were willing to give the credit for a larger part of their yield increases to the use of more and better fertilizer. Another reason given by a large number of farmers was the improved farm practices or farming methods for potatoes. A larger proportion of growers in the Upper

Peninsula than in the other sections of the state increased their potato acreage during the war years. These growers are limited in the number of crops that can be grown profitably in this area due to natural, climatic and soil conditions. In addition the farmers who increased their acreage were also the ones that increased their yields.

Those growers increasing their yields during the war also continued to increase their yields following the war. Growers evidently continued to practice the improved techniques of production that they learned during the war years. Another interesting observation relative to yields was that farmers with less than 20 years of experience increased their yields more than the others. In the post-war years growers decreased their acreages in potatoes but still the trend in increased yields continued. Much of the acreage taken from potatoes was used to produce grains. Oats and rye were suggested by the greatest number of growers as possible alternatives to producing potatoes. However, it was suggested that perhaps an expansion of the dairy enterprise might be the most profitable alternative.

Although three-fourths of the growers complied with their 1950 acreage allotment, only one-fifth indicated that they had intentionally planted within the assigned number of acres. In most cases the allotment was said to be greater than the actual need. Those growers not complying either didn't desire to pay attention to allotments or didn't want to upset their rotation plans. Compliance by growers was found to be greatest in the Upper Peninsula. Acreage allotments apparently had some effect in controlling the acreage planted to potatoes. However, when reductions in acreage were being made, yields were increased greatly. Evidently growers substituted other inputs such as better seed, more seed, and fertilizer to replace

the reduced production input of land. Thus the allotments on potatoes had little effect on total production. Perhaps as a result of acreage allotments producers were encouraged to seek out and to learn the best production practices known for potatoes. Having acquired this information and proven its effectiveness, farmers undoubtedly have been able to make more efficient use of their resources as a result of acreage allotments.

One-half of the growers interviewed sold potatoes to the government through the 1950 program. Their main reasons for using the program were that they could not find other outlets, the support price was above the market price, and the government was the only legal market for No. 2's. More growers in the Upper Peninsula used the government outlet than did the growers closer to the centers of population. However, a high proportion of the producers in Marketing District Two sold their entire crop to the Department of Agriculture. With the uniform support price for the state, the producers in the Upper Peninsula received a price advantage from the government. On the other hand, the growers in District Three were allowed to sell a much lower grade in the open market. In areas where the country dealers were the chief market outlets for potatoes there was an unwritten agreement for the potatoes eligible for support to go to the government and the dealers would buy the others.

Livestock farmers who also raised potatoes used the program more than other types of farmers. By selling to the government they were able to rebuy the potatoes for one cent per hundredweight for livestock feed. Fewer producers with yields fewer than 200 bushels per acre sold potatoes to the government than did others. This is undoubtedly due to the fact

that many of those growers were located in Bay County where yields are relatively low and the farm price of potatoes greater than in other areas of the state. In addition, the failure to use the program may be another indication of poor management. A much smaller proportion of the farmers with over 20 acres of potatoes sold their entire crop to the government.

Along with producers in five other states, Michigan growers had the opportunity to vote on a marketing order in 1950. The approval of marketing order was a condition of price support for the area. While 52 per cent of the growers could remember voting, only 52 per cent of these approved the order. These results would indicate that Michigan had a marketing order forced on them by the growers of the other states. The greatest support came from those producers who later sold their entire crop to the government and from those located furthest from the large commercial markets. The farmers not selling potatoes to the government either did not vote or were opposed to the order. The groups of interviewees with 20 acres or more of potatoes, performing excellent market practices, and having more than$3,000 invested in potato equipment were opposed to the program. These men were probably more aware of the order's interference in their marketing program. In addition they undoubtedly experienced greater expense in marketing due to the higher inspection fees and, if handlers, they were required to aid in the costs of the administration of the order.

A smaller per cent of the growers voted on the order in 1951 when it was not tied to price supports. In this referendum the main opposition to the order in Michigan came from those farmers planting 20 acres or more of potatoes, having more than 30 per cent of their productive man-work units

in potatoes, performing excellent production practices, having more than $1,500 invested in potato equipment, and specializing as crop farmers. A larger proportion of farmers with less than 10 acres of potatoes and with less than 10 per cent of their productive man-work units in potatoes did not vote in the referendum. Support for the order came principally from those that favored its operation in 1950 and from those who voted in favor of it in 1950.

It might have been expected that growers' production practices would change as a result of the termination of the price support following the marketing of the 1950 crop. While a majority of the growers continued to use the same quantities of seed and fertilizer per acre and the same quality of seed, there was an increase in the number of producers who used less intensive production practices. By 1952 a larger percentage of the producers decreased their 1950 quantities of seed and fertilizer applied per acre than increased them. There was a much poorer quality of seed planted in 1952 than in 1950.

It will be recalled that in the United States the yield per acre set a new record high each year that the support program was in effect except for the 1949 crop. The per acre yield in the United States has decreased slightly since price supports were withdrawn. Apparently the former plan of supporting potato prices encouraged farmers to increase their yield per acre by the performance of better production practices. This was undoubtedly due to the fact that growers felt that they were in a more favorable position, as a result of the elimination of price risk, to spend money for better quality of seed and larger quantities of seed and fertilizer. In addition, there were no quotas on total production which would limit their marketings.

With the withdrawal of price supports, however, growers have not continued to improve their production practices at the former rate. Thus, it is apparent that one of the main advantages of the potato price supporting activities was the fact that it promoted the trend of better practices, with the resulting higher yields per acre. This principle is often overlooked in measuring the value of the support operation to the economy.

CHAPTER V

ATTITUDES TOWARD FEDERAL SUPPORT PROGRAM

The potato farmer has been pictured by the general public as an individual who was very happy when the government was spending huge amounts of money to support the price of his product. Under these assumptions, the potato farmer should have been very jubilant as the United States government purchased about $550 million dollars of potatoes from the 1943 through 1950 crops. Furthermore, the government outlet provided him with a readily accessible market for his potatoes. In the program which supported the price of the 1949 and 1950 crops the government paid the same price for the U.S. No. 2 grade as it did for the U.S. No. 1 grade. The latter feature would naturally interest the farmer as it provided a market for the lower grade potatoes.

In addition to the price support program, marketing agreements and orders along with marketing quotas were other federal programs that received the attention of the potato farmer.

The farm organization leaders believed that the potato farmer should receive price protection. When the possibility of losing the support feature for potatoes became apparent, representatives of the three major farm organizations appeared before the Senate Agricultural committee in 1950 and suggested various methods whereby the potato might receive further price support.

The farmers' attitudes toward the price supports will be examined in this chapter. As each of the farmers interviewed had produced potatoes in

1950, he was well aware of the potato support program and the publicity that had surrounded it.

After a series of other questions, each grower interviewed was asked this question, "Turning now to the government price support program, do you think it was a good or bad thing for you?" The answers to this question are shown in Table 38.

TABLE 38

Farmers' Attitudes Toward the Potato Price Support Program

Answer	Number	Per cent
Yes, price supports were a good thing	77	30.8
No, price supports were a bad thing	146	58.4
Don't know whether they were good or bad	27	10.8
Total	250	100.0

The growers who had an opinion regarding the price support program were approximately two to one opposed to the program. Of all the growers 58 per cent were against the program, 31 per cent favored it, and 11 per cent did not know. These results would seem to contradict the belief among consumers that the farmers were the principal advocates of the program.

The most significant association was found between the farmers' attitudes and the distance from market. The farmers farthest from the consuming market were more in agreement with the program than those closer to market (Table 39). Approximately 70 per cent of the growers in the Upper Peninsula, or Marketing Area No. One, liked the program, but only 20 per

cent of the producers in Marketing Area No. Four favored the support program. A similar relationship was true regarding Marketing Districts.

Several reasons may be given for this situation. As marketing orders were so closely tied to supports in 1950, growers quite often felt that the marketing order and support program were one and the same program. The marketing order made it illegal to sell lower grade potatoes. This order enforced by the federal government had considerably more effect on the sales of the producer nearest to market. He undoubtedly could find a market for his lower grade potatoes and the marketing cost would not be excessive. On the other hand, the grower further from market could not profitably ship his lower grades to market as the transportation costs would take a large proportion of the net price. Therefore, the grade restrictions had less impact on the grower further from market. Market outlets and market opportunities are somewhat limited to the growers the further they are located from the consuming market. Therefore, when a producer is presented with a readily accessible outlet in his county he enjoys the situation. The farmer needed to display very little initiative in selling potatoes despite the fact that post-war crops were much larger than the demand.

Another significant association was found between the farmers' attitude and the type of farmer. More livestock farmers liked the program than did the entire group of farmers. Livestock producers were about evenly divided in their attitudes. The largest proportion of the men in Marketing District One (Upper Peninsula) were designated as livestock farmers while the largest percentage of those in District Three were crop farmers. Probably the livestock farmers who were also potato producers appreciated

the fact that the government subsidized their cattle feed. The government paid the support price for their potatoes and then livestock farmers had the privilege of buying the potatoes at one cent per hundredweight for use as livestock feed. This situation was very profitable for the livestock farmer.

TABLE 39

Farmers' Attitudes Toward the 1950 Potato Price Support Program, by Marketing Areas

Attitude	Marketing Areas*							
	One		Two		Three		Four	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Good	25	69	25	25	22	25	5	21
Bad	10	28	70	69	51	57	15	62
Didn't know	1	3	6	6	16	18	4	17
Total	36	100	101	100	89	100	24	100

* Marketing areas defined in Chapter Three.

The part-time farmer was decidedly against the program. Most of these farmers were located in the southern part of Michigan where the growers were opposed to the program's operation. Usually the part-time farmer planted a smaller acreage of potatoes and he felt that the program discriminated against him through acreage allotments and price.

Of those 52 farmers with 20 acres or more of potatoes and having an opinion regarding the support program, 79 per cent were opposed to the program. These men were undoubtedly firmly established in the potato business and desired to take their chances as to price in the free market.

Furthermore, they undoubtedly were of the opinion that the program was probably encouraging many farmers to stay in the business which added to the annual production and as a result lowered the price. These farmers unquestionably were more affected by the government's interference and regulations. An acreage reduction of ten per cent to a farmer with 50 acres might have greater consequences than a similar reduction to a farmer of five acres. The former might not be in position to transfer his factors of production to other crops or enterprises while the latter would probably be engaged in the production of other crops and would have the equipment and "know-how" to shift his acreage to them.

An illustration of this point might be a potato farmer who was interviewed in Bay County. This farmer had only 76 acres of tillable land and has been growing 76 acres of potatoes for several years. Certainly an acreage allotment reduction would have greater effect on his operations than a similar percentage cut to a man with seven acres of potatoes who would normally have the equipment and resources to transfer his factors of production to other crops or enterprises.

There was no association between farmer's attitudes toward the support program and the age of the farmer, size of farm, year started farming, investment, years of experience in raising potatoes, yield, practices, price received per bushel in 1950, or membership in farm organization.

To determine the reason for the grower's attitudes toward the program the question, "Why do you think this?" was immediately asked. The reasons of those farmers who favored the support program are indicated in Table 40.

TABLE 40

Reasons Given why Producers Thought the Potato Support Program was a Good Thing

Reason	Number	Per cent
Assured farmers a guaranteed price	42	54.5
Sold surplus to government	15	19.5
Raised prices to farmers	14	18.2
Other reasons	4	5.2
Didn't know why support prices were good	2	2.6
Total	77	100.0

From these answers it was evident that these potato farmers wanted a crutch to aid them in maintaining potato prices. They were apparently fearful that the free market would not give them a favorable price for this product. They also enjoyed the opportunity of selling their surplus to the government. For the complacent individual the government provided the farmer with an ideal situation. It was not necessary for him to seek better outlets. If he were an eligible producer, he had only to visit the county P.M.A. office.

Growers who believed the support program to be a bad thing apparently looked beyond the direct effect of the support feature. Their answers are shown in Table 41. Approximately half reasoned in several ways but came to the similar conclusion that the program was responsible for the surpluses and therefore lowered the price. They stated that the guaranteed price encouraged new growers or large growers to invest in potato equipment and to rent or to purchase large acreages of potato land. A number carried

this a step further and arrived at the conclusion that the over-production created by the program brought about low potato prices for the farmer.

TABLE 41

Reasons Given why Producers Thought the Potato Support Program was a Bad Thing

Reason	Number	Per cent
Lowered price because of over-production	36	24.6
Encouraged new or big growers to expand	33	22.6
Disliked government intervention	28	19.2
Discriminated against small grower as to price	21	14.4
Provided for too low a support	12	8.2
Discriminated against small grower as to allotments	6	4.1
Necessitated high taxes	6	4.1
Required too much administration	1	.7
Didn't know why support prices were bad	3	2.1
Total	146	100.0

One-fifth of these growers disliked the intervention of the government and its employees in their business. Several farmers went as far as to refuse to allow the county P.M.A. committeemen to measure their potato acreages. These producers were not pleased with the idea of someone else telling them how many acres of potatoes they could plant.

Several growers felt that the program discriminated against the small producer. As the large grower might have had a lower unit cost of production, he was able to profit more when a guaranteed price was established for potatoes. In addition, the small grower could not market his potatoes

as successfully and it was, therefore, necessary for him to sell his product to the government rather than to maintain or establish permanent market outlets. It was also said that there was discrimination against the small grower in the allocation of acres under the allotment program. This was said to be due to the fact that the grower with the larger acreage had more influence with the P.M.A. committee. While some growers thought the program was bad, they evidently believed in the support principle. Their reason for being opposed to the program was that the support price was too low. They undoubtedly were comparing the 1949 and 1950 support level of 60 per cent of parity to the 90 per cent of parity guarantee of the support program for the 1943 through 1948 crops.

After determining the producer's reasons for his attitude regarding the support program, all growers were requested to state the things they liked and also disliked about the program. More than half the producers found nothing or did not know of anything that they liked about the program (Table 42). It was interesting to note that 30 per cent of the growers who liked the program could not give a reason why they liked it. Approximately 70 per cent of those who considered the program to be a bad thing did not mention a favorable point for it. The assured price was the principal reason given for favoring the program. One-fourth of the farmers enjoyed being guaranteed at least a part of their cost of production. Furthermore, the gamble or risk of price was removed from their hands.

TABLE 42

Factors That Producers Liked About

the Potato Price Support Program

Factor	Attitudes Toward the Support Program							
	Favor		Opposed		Did not know		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Assured price	36	46.7	22	15.1	6	22.2	64	25.6
Govt. bought low grades	8	10.4	11	7.5	3	11.1	22	8.8
Raised prices	3	3.9	3	2.1	1	3.7	7	2.8
Entire program	4	5.2	2	1.4	1	3.7	7	2.8
Cheap cattle feed	0	0	3	2.0	1	3.7	4	1.6
Other	3	3.9	6	4.1	0	0	9	3.6
Nothing	18	23.4	89	61.0	14	51.9	121	48.4
Didn't know	5	6.5	10	6.8	1	3.7	16	6.4
Total	77	100.0	146	100.0	27	100.0	250	100.0

The growers had greater convictions when it came to a discussion of reasons for disliking the program (Table 43). Only one-fifth said that they could think of nothing or knew of nothing that was bad. The administrative aspects -- allotments unfair or discriminatory, dishonesty, grade restrictions unfair or discriminatory -- caused the greatest displeasure among the producers. While the consumers were concerned with the excessive cost that accompanied the waste and dumping of potatoes, only a few growers mentioned this factor. As the producer was closer to the program, he was able to view the inequalities of administration to a greater extent. Furthermore, the administrative aspects undoubtedly had the greatest hardship effect on the grower. The dumping or waste of potatoes did not inconvenience

him and in some instances he profited through the use of the surplus potatoes for cattle feed or, to a minor extent, as a form of fertilizer when the potatoes were spread on the fields.

TABLE 43

Factors that Producers Disliked About the Potato Price Support Program

Factor	Attitudes Toward the Support Program							
	Favor		Opposed		Did not know		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Administrative aspects	24	31.1	43	29.5	6	22.2	73	29.2
Expansion by many large growers	13	16.9	18	12.3	3	11.1	34	13.6
Dumping and waste	6	7.8	21	14.4	3	11.1	30	12.0
Govt. intervention	2	2.6	17	11.6	4	14.8	23	9.2
Price wasn't high enough	8	10.4	6	4.1	0	0	14	5.6
Entire thing	0	0	5	3.4	0	0	5	2.0
Other	5	6.5	9	6.2	2	7.4	16	6.4
Nothing or did not know	19	24.7	27	18.5	9	33.4	55	22.0
Total	77	100.0	146	100.0	27	100.0	250	100.0

Effect of Risk on Farmers' Attitudes

Earlier, it was stated that 42 farmers or more than half of the farmers favoring the support program did so because it guaranteed or assured a definite price. The others in the interview approved the plan for other reasons, did not know what their attitude was, or were against the support program.

An attempt was made to determine the growers' attitude regarding risk of price as compared to a set price announced in advance of planting. The following questions were asked each grower:

"Now I know this is just guesswork, but how about taking a guess on the price you'll get for this year's crop?[1]"

"Would you agree now to sell your crop for (expected price)?"

"All right, what about this? I'll toss a coin; if it comes up heads you get (price which is 50 per cent above the expected price) for your crop, tails you get (price equivalent to 50 per cent below the expected price). Would you rather take this chance or take a firm offer of (expected price)?"

"Let's change that a little so that tails gives you (price which is 25 per cent above expected price) and heads gives you (price which is 25 per cent below expected price). Now would you take the chance or the firm offer of (expected price)?"

Approximately 87 per cent of the growers stated that they would prefer the expected price for their next fall's potato crop rather than take a chance in the toss of a coin for a price 50 per cent above or below the expected price. When the gamble was lessened to 25 per cent above or below the expected price, there were 83.6 per cent of the growers who still desired the expected price. If the toss of the coin can be likened to the chance that the grower would take regarding price in the free market, it would appear that farmers overwhelmingly favor an announced support price for their potatoes.

Fluctuations of 25 and 50 per cent in potato prices are not uncommon in Michigan as the average potato price for five years out of sixteen varied over 25 per cent from the previous year (Table 44). The per cent of change in price from 1946 through 1949 was relatively low due to the support operations of the government.

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[1] Hereafter this answer will be referred to as the expected price.

TABLE 44

Per Cent Changes in the Michigan Annual Potato Price, 1935-1951

Year	Average price per bushel	Per cent change from previous year
1935	$ .55	
1936	1.02	85
1937	.49	52
1938	.48	3
1939	.67	40
1940	.57	15
1941	.85	49
1942	1.25	47
1943	1.33	6
1944	1.59	20
1945	1.35	15
1946	1.39	3
1947	1.47	6
1948	1.55	5
1949	1.48	5
1950	1.14	23
1951	1.28	12

There was an association between the attitude toward the program and the desire to take the chance or the firm offer. Eighteen per cent of those not favoring the program were willing to take the chance of a price 50 per cent above or below the firm offer while only six per cent of those for the program desired to take the chance (Table 45). When the margin of chance was reduced to 25 per cent above and below the firm offer, about 19 per cent of those opposed to the program and eight per cent of those favoring the program were willing to take the chance.

TABLE 45

Willingness to Take Chance Regarding Price Related to Attitudes Toward the Price Support Program

Willingness to take	Liked Program		Disliked Program	
	No.	Pct.	No.	Pct.
50 percent chance	5	6.5	26	18.2
Expected price	72	93.5	117	81.8
Total	77	100.0	143	100.0
25 percent chance	6	8.0	27	18.9
Expected price	69	92.0	116	81.1
Total	75*	100.0	143	100.0

* Two were not sure.

Farmers' Attitudes Concerning the Effect of Price Support Program

Although much has been written about the theoretical economic effects of price supports, very little has been said about the farmers' opinion regarding the results of the potato price support program. In the previous chapter, it was noted that there was an immediate increase in acreage and yield when the program was started.

Growers were asked, "Do you think that these wartime acreage and yield figures would have been any different if there hadn't been the price support program on potatoes?" Only 21 per cent of the 238 interviewees having an opinion felt that the support program influenced their acreage and yield increases. The remaining group of 79 per cent stated that the program did not create any changes as far as they were concerned. Perhaps the latter growers made no significant change as a result of the support

plan or they might have considered that the war would have automatically increased the demand for potatoes.

Actually, the program had very little effect on price during the war years. The total government support purchases for the three crop years, 1943, 1944, and 1945, were one-fourth less than the lowest quantity purchased in any single year after the war. Furthermore, the 40 million bushels purchased during the three war years were only 7.2 per cent of the total quantity of 554 million bushels of potatoes purchased under the price support program during its eight years of operation.

A majority (58 per cent) of the 50 growers who felt the program had an effect on their acreage and yield changes stated they would not have grown as many potatoes if the government had not requested them to do so. There might have been the same results with a government request which was not backed by the price guarantee. These increases are offset in part by the 18 per cent of the producers who said that they would have grown more had it not been for price supports. These growers felt that the chance of profit was lowered as many growers shifted to potatoes because of the price incentive.

One association was found between the opinion regarding the wartime effect of the program and the attitude toward the program. One-third of those farmers approving the program felt that the price support program had an effect on wartime acreage and yield figures. Only sixteen per cent of those disapproving the program had the similar thought. A few of these might have been the ones who stated that the price guarantee might have discouraged production. There was no association between the growers' opinion of the wartime effects of the program and location, years of

experience, size of farm, size of potato acreage, yield production practices, and investment in potato equipment.

The question "Do you think the government potato program has affected large and small growers differently?" was asked each farmer. Over 84 per cent of those having an opinion answered in the affirmative. The ways that they felt the program had a different effect on growers with various sizes of potato acreages are shown in Table 46.

TABLE 46

Reasons Program Had Different Effect on Growers with Large and Small Potato Acreages

Reason	No.	Pct.
Large grower expanded	119	61.0
Took the gamble out for the big operator	30	15.4
Large grower more efficient	18	9.2
Allotments discriminated against small grower	17	8.7
Large grower did not comply	5	2.6
Program favored small grower	4	2.1
Other	2	1.0
Total	195	100.0

The largest number of growers felt that the large producer expanded his potato acreage while the small operator contracted or held his acreage constant. It would be interesting to know whether the interviewee based his answer on observations within his township or on reports in magazines and newspapers. The press gave many the impression that the total potato acreage was expanding greatly as a result of price supports. Actually, the

potato acreage in the United States declined over one-half while the program was in operation.

Many felt that by the elimination of gamble and risk the big operator was in a better position to take advantage of the support feature. He had more capital so could buy more equipment and land, besides being able to use better seed and more fertilizer. In addition, as the large grower had more machinery, available irrigation, and better storage facilities, it was thought that his unit cost of production was probably much lower than the support level. Only four growers were of the opinion that the program favored small growers. Perhaps the small grower had fewer available outlets due to his smaller production and the government provided a very ready market for these growers.

Associations were found between the growers' attitude regarding the effect of the program on large and small growers and the producers in Marketing District One, growers with 30 acres or more of potatoes in 1950, crop farmers, and producers with over $2,000 invested in potato equipment. While the majority of the members of these groups were of the opinion that there was a difference in effect, a larger percentage than in the entire survey considered that the program had effect on the large grower not different from that on the small one (Table 47).

TABLE 47

Opinion as to Effect of Program on Growers of Large and Small Acreages

Group	Program Affected Large and Small Grower Differently				Total	
	Yes		No			
	No.	Pct.	No.	Pct.	No.	Pct.
Entire group	195	84	38	16	233	100
District One	22	63	13	37	35	100
Crop farmers	52	74	18	26	70	100

The growers in Marketing District One did not have particularly larger potato acreages than the others. As these producers favored the program, they seem to protect it in their answers. The other groups are very much related. There was an extremely high degree of relationship between investment and size of potato acreage as those farmers having a large number of acres of potatoes had larger amounts invested in potato equipment. In most cases the crop farmers were those farmers with the larger potato acreages. The farmers with the larger potato operations would say undoubtedly that the program was the same for all growers as they would be rather hesitant to admit that they received an advantage. Several said that the price of the support was equal, regardless of the size of acreage. As the average yield per acre in the United States increased greatly during the years that the price was supported, proponents explained that much of this expansion was due to the program. The interviewer read the following statement and question, "Many growers, not necessarily around

here but all over the country, seem to have grown bigger and more efficient under the program. Why do you think this has happened?". The answers to this question are shown in Table 48.

TABLE 48

Reasons Given as to Why Growers Grew Bigger and More Efficient Under the Potato Program

Reason	No.	Pct.
Took the gamble or risk out so big fellow could afford to produce efficiently	92	36.8
Irrigation or other technological developments	44	17.6
Natural trend--occurred in all times of production	30	12.0
Allotment politics, discrimination, etc.	15	6.0
Growers had more money so could spend more	14	5.6
Large growers just more efficient	14	5.6
More profit on potatoes because of program	14	5.6
Other	10	4.0
Didn't know	17	6.8
Total	250	100.0

Almost half of the producers apparently agreed with the statement as their answers indicated that the program was responsible for the increased efficiency. They reasoned that as a result of the support program there was no gamble risk for the big operator as he could produce more efficiently. In addition, there was more money or more profit in potatoes and more politics and discrimination in the allocation of acreage allotments to the big grower. Many of the other growers realized that the rapid strides in the yield increases per acre would have taken place despite the program

as it was a natural trend in most industries. During this period potato growers had the opportunity to take advantage of such technological improvements as irrigation, DDT, better equipment, and better production practices.

The program was expected to have a favorable effect on the farm price of potatoes. These farmers who had actual experience with the program were asked, "Do you think that the average price of potatoes, from 1943 through 1950, was raised by the price support program?". More than sixty per cent of those producers having an opinion answered in the negative or that the price was lowered as the result of the program. Perhaps the memory of the growers was rather short, as the price received in 1950 was about one-fourth less than the price for the previous three years and much of the blame for the depressed price was placed on the potato program. Much emphasis was given to this reasoning as the farm price for the 1951 crop was more favorable than the 1950 crop and there was no support on the former.

The farmers with less than ten acres of potatoes in 1950 were evenly divided in their opinions regarding the effects of the program on price, but four-fifths of those with 20 acres or more believed the operation of the program resulted in the price being lower. Another interesting association was the fact that of those farmers who stated that they received more than $2.00 per bushel for their 1950 crop, four-fifths stated that the support program had raised their price. These growers undoubtedly performed some extra service to obtain this price and decided that the support program had aided them by removing many potatoes from the market and much of the initiative of other producers to provide extra services. It was a

relatively simple matter for an eligible grower to sell potatoes to the government. While only 22 per cent of those who did not like the program considered the price was raised by it, there were 71 per cent of those favoring the program who estimated that the price had been raised.

Another association which was very closely related to attitudes toward the program was that of allotment compliance. The opinions of those who complied with their acreage allotment were about evenly divided, while 81 per cent of those who did not comply or did not remember their allotment decided that the program lowered price.

To determine the consistency in the minds of the producers relative to price and income effects of the support program, each grower, later in the interviewing period, was asked, "If there had been no price supports, do you think your income from potatoes would have been higher, lower, or about the same?" Forty-four per cent replied higher, 20 per cent lower, and 36 per cent, about the same. Most of the growers stating that their income would have been higher without the program were of the opinion that there would have been less production and therefore higher prices. Other reasons given were that better grades would have otherwise been grown and that the support prices were really ceiling prices as the buyers would judge the market from the announced level of support. The majority of those having the opinion that without the program their income would have been lower, reasoned that the government had bought potatoes which otherwise would have depressed prices by being sold on the open market.

There was a high degree of significance between the growers' attitudes regarding the price and income effects of the program. Four-fifths of those who reasoned that the program had raised their prices for potatoes also felt

their income from potatoes had been increasedwhile about four-fifths of the group with the opposite opinion decided that their income had been lowered as a result of the program. Those farmers who favored the various government programs considered their income from potatoes would have been lowered if there had not been the program (Table 49). Due to their approval of price supports, producers in Marketing District One and livestock farmers also had a similar opinion. Along the same lines, those opposed to the federal programs and the farmers with more than 20 acres of potatoes advised that they would have had higher incomes without the program.

TABLE 49

Growers Opinion as to Income if There Had Been No Support Program

Group	Income							
	Higher		Lower		About the same		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Entire group	107	43.4	50	20.2	90	36.4	247	100
Favor support program	9	11.8	43	56.6	24	31.6	76	100
Favor 1950 marketing order	29	32.6	28	31.5	32	35.9	89	100
Favor marketing quotas	8	20.5	16	41.0	15	38.5	39	100
Marketing District One	9	25.0	14	38.9	13	36.1	36	100
Livestock farmers	23	30.3	26	34.2	27	35.5	76	100
Opposed to support program	89	61.4	5	3.5	51	35.1	145	100
Against 1950 marketing order	56	56.5	5	5.1	38	38.4	99	100
20 acres or more of potatoes in 1950	32	57.1	3	5.4	21	37.5	56	100

There was no association between the growers' attitudes toward the price effect of the program and the price expected for the 1952 crop, willingness to take a chance regarding price, use of support program, age of the farmer, yield, or investment. There was no association between the grower's attitude toward the income effects of the program and location, use of the support program, age of the farmer, type of farmer, membership in farm organization, yield, or investment.

Acreage Allotments

With rising yields and declining consumption, the potato industry was placed in an extremely difficult position following World War II. If there had been no price support program, the adjustment in acreage would have been made through the pressures of economic forces. However, with the price support program in effect, the government, rather than the individual grower, was confronted with the problem of establishing a necessary balance between supply and demand. The problem was especially difficult for the government as there was no economic compulsion on the grower to curtail production and no positive controls. Each major producing area considered that it had an economic advantage and therefore desired other sections to reduce acreage. In addition, each area wanted to maintain its acreage so as to be in the most favorable position under any acreage allotment formula.

Furthermore, the establishment of acreage goals required that some assumption be made as to probable yield. Rather than risk the chance of having too few potatoes as a result of unfavorable weather, the government was forced to underestimate probable yields. To make the situation more difficult, each year during the allotment program a new record was set for

yields. The 1950 yield of 253 bushels per acre in the United States was 83 per cent higher than the record set in 1942.

Although a comparison of the total United States acreage goals and planted acreage indicates compliance to have been very good, it is very misleading. The states having high yields per acre tended to overplant their allotments while a number of states with low yields substantially underplanted their goals. Michigan's 1950 acreage allotment was 60,200 acres and 87,000 acres were planted or 44 per cent in excess of the goal.

Actually the growers who complied with their allotment were the losers as the government guaranteed the market price of potatoes. The market price was not discriminatory to the non-eligible grower or to the eligible producer since each received the same. Growers who increased or maintained their acreage made no contribution to production adjustments and were in a more favorable economic position compared to their neighbors who complied each year with reduced acreage allotments.

Realizing that acreage allotments had failed to bring a decrease in total production, Secretary Brannan lowered the support price for potatoes to 60 per cent of parity, the lowest support limit authorized by Congress at that time for potatoes. While usually striving for high supports for commodities, the Secretary attempted to justify his action by stating that he did not consider dropping price supports a desirable way to control excess production. He added that Congress had given him no other mechanism with which to seek adjustments.

The Fruit and Vegetable Advisory Committee of the American Farm Bureau Federation had a great deal of discussion in 1949 regarding acreage allotments in connection with price supports. This Committee's recommendation, which was adopted by the Board of Directors as Farm Bureau policy,

requested price support at 60 per cent of parity and made no mention of acreage allotments. The Committee and the Board felt that lowering the support level would automatically cut the acreage of potatoes. Both the Secretary of Agriculture and the Farm Bureau leaders failed to consider the rapid increase in yield that was taking place. For example, the 1950 production was 21 million bushels larger than the crop of 1945 but was grown on an acreage one-third less. Thus the reduction of one of every three acres was more than completely offset by an increase in yield per acre.

The growers were asked the following questions relating to acreage allotments: "How fair do you think the acreage allotments were?" and "How well do you think they worked?" Sixty-three per cent of the growers stated that the acreage allotments were fair. In many areas of Michigan there were many growers going out of potato production, which fact reduced the task of the distribution of the county acreage allotment. Growers quite often were able to appeal their allotment and receive a larger one. Perhaps due to these circumstances, the remaining group of farmers might have considered allotments unfair.

Slightly more than one-half, or 53 per cent of the producers were of the opinion that the allotments did not work. The majority (55 per cent) of the 117 men stated that the allotments were unfair, which might explain why they thought they did not work. Eighty-three per cent of those growers who suggested that the allotments worked well, also thought they were fair.

An association was found between the attitudes toward the fairness of acreage allotments and compliance with them. About three-quarters of

those growers who did not comply with allotments in 1950 stated they were unfair and only 30 per cent of those who complied thought they were unfair. Many of the growers not complying undoubtedly had had unfortunate experiences in obtaining acreage allotments from the P.M.A. committee. Significantly, more of the growers who favored the program also considered that the acreage allotments were fair and worked well. Over three-fourths of the producers supporting the program stated the allotments were fair and 63 per cent thought they worked well. There was no association found between the attitudes of fairness and workability of acreage allotments and location, size of the farm, size of potato acreage, price received in 1950, quantity sold to the government, attitude toward marketing order, age of farmer, type of farmer, membership in farm organization, production practices, and investment.

While discussing acreage allotments, the interviewer asked each grower, "About how many growers around here do you think did not cooperate in the program--very few, if any; some; or quite a few?". Most (65 per cent) of the growers thought that their neighbors cooperated with the program (Table 50).

Interesting associations were discovered in the fact that growers attempted to vindicate their own responses to the program by stating that their neighbors made similar decisions. About three-fourths of those who complied with their acreage allotments considered that very few growers did not cooperate (Table 50). Over one-half of the growers that did not comply stated that quite a few growers did not cooperate with the government in the potato program. Four-fifths of the growers selling their entire

crop to the government in 1950 also thought that most of their neighbors came under the program. A higher percentage of those farmers who did not sell to the government than in the entire survey replied that many producers failed to cooperate with the program. Almost one-third of those opposed to the program and only ten per cent of those favoring it replied that there were many non-cooperators.

TABLE 50

Estimate of Number of Growers Who Did Not Cooperate in the Program

Group	Very few		Some		Quite a few		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Entire survey	156	64.8	29	12.0	56	23.2	241	100
Location factor								
Marketing District One	34	94.4	1	2.8	1	2.8	36	100
Marketing District Three	40	42.1	17	17.9	38	40.0	95	100
Attitudes towards program								
Favored	59	78.6	8	10.7	8	10.7	75	100
Against	81	58.3	13	9.3	45	32.4	139	100
Cooperation with program								
Complied with allotment	127	73.0	20	11.5	27	15.5	174	100
Did not comply	12	34.3	5	14.3	18	51.4	35	100
Sold entire crop to govt.	45	80.4	7	12.5	4	7.1	56	100
Did not sell to govt.	60	50.8	18	15.3	40	33.9	118	100

Implications for Policy

While farmers were generally believed to be the chief beneficiaries of the potato price support program, they were two-to-one against its operation in 1950. The approval of the programcame from those producers

located farthest from the terminal market. This may be explained by the fact that the support price was more favorable relative to the farm price in the distant counties. In addition, the marketing restrictions which accompanied the support program were less burdensome to these growers than to the producers near the large centers of population. It costs relatively more to send a lower grade of potatoes to market than it does a higher grade. Thus as expenses for transportation increase, it becomes more economical to ship a better grade to market.

The livestock farmers, who were located principally in the Upper Peninsula, were found to favor this program more than did the other types of farmer--crop, general, and part-time. These livestock producers were receiving double benefits from the program because the price of their potatoes was guaranteed and they were able to buy extremely cheap cattle feed in the form of potatoes when other feed prices were being supported. In addition, many were located in the area where the support price had a greater effect on the farm price. The part-time farmers, who were located mainly near the industrial areas, were against the program, as undoubtedly the support program had very little direct effect on the increase in their price of potatoes. The producers with 20 acres or more of potatoes were opposed to the operation of the program. These men probably were more affected by the production and marketing restrictions that accompanied the program. The men with the larger production of potatoes were more likely to ship their own potatoes. As handlers of potatoes, they were required to pay fees for inspection and for administration of the order and to abide by the marketing regulations.

The assurance of a price was the reason given by more than one-half of the growers who felt the program was a good thing for them. Evidently producers place a heavy premium on a plan of a forward price because there is no risk or gamble of price. Apparently they were fearful that the free market would not provide them with a favorable return.

Of those who felt the program was a bad thing the largest percentage mentioned the fact that the program lowered the price of potatoes. These growers were of the opinion that the program caused an expansion in potato production which reduced the price. They evidently felt that the free market price would have been higher.

It was interesting to note that price was the principal issue of the program given by both those who decided the program was good and those who felt it bad. As the principal reason for being opposed to the program was the fact that the price was lowered by it, it is possible that if the price for potatoes becomes very low in the free market, growers might change their attitudes and request government assistance in the form of a price support program.

The principal point that the growers did not like about the program was the administrative aspect. Farmers evidently were not too concerned with the cost of the program or the dumping of potatoes. As the administrative aspect undoubtedly had the greatest effect on the individual producer, he was conscious of this point rather than the waste of potatoes.

Instead of mentioning that the program provided an outlet for surplus potatoes or that the price was raised, growers indicated that the assured price was the principal reason for liking the program. The point was re-emphasized when growers stated that they would prefer a firm offer for their potatoes rather than taking a chance on a price which might be 50

per cent above or below the expected price. However, those opposed to the program were more willing to take the chance. These results indicate that growers favor a set price which is announced in advance of planting. However, they are opposed to the government's interference and red tape attached to a program granting an assured price. Apparently, under the price conditions existing after the 1950 crop, the disadvantages associated with a program of a price guarantee were greater than the advantages of an announced forward price.

Although consumers complained of the high cost of potatoes, the majority of the farmers believed that the effect of the program was to reduce the price that they received for their potatoes from 1943 through 1950. These men reasoned that over-production resulted from the program and therefore prices were reduced. This view was widely held by those growers who were opposed to the program, those not complying with their acreage allotments, and those producing more than 20 acres of potatoes. The large majority of those favoring the program and of those receiving more than $2.00 per bushel in 1950 replied that the price was raised by the program. Evidently, to the former group of growers the support price was relatively more favorable than the market price. The latter growers undoubtedly were of the opinion that the program permitted them to receive a higher price because it diverted potatoes to other outlets.

The program was reported to have had the same effects on income from potatoes as it did on price. Those farmers approving the various government programs felt that their income would have been lower without it. Those disapproving the government plans held the contrary opinion, as did the majority of those farmers having 20 acres or more of potatoes.

The large majority of the farmers felt that the program affected large and small growers differently. The grower of a large number of acres was said to have expanded his potato enterprise as price was no longer a risk for him. As he had capital, he was considered to be in a better position to obtain more advantages from the program. It was also inferred that because of the economies of scale, the large producer was able to produce potatoes cheaper than the other grower. As a result, he received a greater profit per bushel.

Despite the fact that the administrative aspects of the program were mentioned as being the most disagreeable feature of the program, most of the growers considered the acreage allotments to be fair although they were not practical. They considered for the most part that very few of their neighbors failed to cooperate in the program. However, growers were interested in justifying their own failure to cooperate with the acreage allotments and other features of the program. More than one-half of the growers not complying with acreage allotments were of the opinion that their neighbors did not either. In addition, a large percentage of those who did not make use of the program felt that many of their neighbors similarly failed to do so.

CHAPTER VI

ATTITUDES TOWARD FEDERAL MARKETING PROGRAMS

While the mandatory price support program for potatoes during World War II did not result in excessive losses to the Government, the situation changed considerably at the end of the war. The administrative officials first attempted to bring supply in line with demand by requiring compliance with acreage allotments. As was noted previously, there were sharply increased acreage yields through intensive cultivation practices on the acreage which was planted. Thus, even though there were material downward adjustments in total acreages, total production was not cut to goal levels. When production controls of acreage allotments were discovered to be proving ineffective, the Secretary of Agriculture announced that the acceptance of marketing orders by growers would be another condition of receiving support. It was hoped that these programs might help stabilize marketing and keep lower grades out of commercial channels.

The compliance with production goals and marketing orders did not result in satisfactory reductions in the cost of the price support operations. One result was that growers who did not cooperate in attempting to adjust supplies to demand received the benefit of a market price which was supported at government cost. Therefore, Congress provided that in 1951 no price support would be extended to producers of potatoes unless marketing quotas were in effect for such potatoes. Thus, as a consequence of the price support program, the attention of the potato farmer was drawn to two federal marketing control programs--marketing orders and marketing quotas.

In theory, these programs should be important as a means of increasing the farmers' income from potatoes, as the demand for this commodity is highly inelastic. The total farm value of the crop should be increased as the industry withholds potatoes from market. In addition, there is a saving of the marketing cost of those quantities which would have been moved to market in the absence of control.

Marketing Orders

The primary objectives of a marketing order program are to establish and to maintain orderly marketing conditions.[1] The government's purpose in requiring the acceptance of marketing orders by growers was to reduce supplies moving to market.

Although Federal Marketing Order No. 60 had been in operation since 1947, there was a referendum in 1950 on an amended order. The revised order was accepted by the required majority of voters so the producers in the six states of the North Central region, including Michigan, had the opportunity to sell potatoes to the government under the support program.[2]

There was an attempt made, under the marketing order, to withhold from the market 15 per cent of the 1950 potato crop from the North Central States. However, it is doubtful that the regulations reduced very substantially the supply of potatoes going to the commercial market, since the

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[1] Previous chapters have given a background and legal basis of the order, the requirements to place an order in effect, the growers' vote in 1950 and 1951, and the 1950 regulations of the order.

[2] Producers in the early-producing area of California; in Long Island, New York; and in Upstate New York, were refused support for their crops because they had rejected marketing orders in 1950 referendums.

marketing program did not restrict production. In addition, since the government was paying the same price for both Grades One and Two, the effect of the order's grade and size regulations on total supply was reduced. Regardless of the order, the better grades would have been sold to the housewife and the lower grades would have been sold to the government.

Even if Marketing Order No. 60 had been effective in limiting the quantity of potatoes held off the market in 1950, the results could very easily have been nullified by increased shipments from other competitive areas not regulated by marketing orders. The reduction of shipments from the North Central States might have been balanced by shipments from New York, Ohio, Pennsylvania, Illinois, and other areas. Thus, unless marketing orders are applied on a national basis with regulations which will proportionately reduce supplies in all states, advantages will be given to some areas not under order regulations.

According to Werner Hirsch,[3] there has been no proof that farmers benefit from marketing orders. He feels that administrative boards, which decide on the quality and quantity to be shipped, must have information on the elasticity of demand with respect to price of the commodity on a given market in any one period of time. Because the administrative boards hardly ever have this specific information, there is no assurance, according to Dr. Hirsch, that their marketing policy benefits the farmers who participate in the marketing order programs.

Each grower in the interview was asked several questions relating to marketing orders. In Table 51 are shown the responses to the question,

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[3] Werner Z. Hirsch, "Marketing Agreements and Cooperative Marketing: Some Cooperative Aspects", Journal of Farm Economics, Vol. 32, No. 2, (May, 1950, p. 217.

"From what you knew of it, were you in favor of the Federal Marketing Order No. 60 as it operated during the marketing of the 1950 crop?". Forty per cent were opposed to the order, 36 per cent favored it, and the remainder indicated that they did not know. The percentage of farmers opposing the marketing order was less than for the support program.

TABLE 51

Growers' Opinion of the 1950 Marketing Order,

By Number of Acres in 1950

Attitudes Toward Marketing Orders	Acres						Total	
	Less than 10		10 to 20		20 or more			
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Favor	45	38.5	28	36.3	16	28.6	89	35.6
Against	34	29.0	30	39.0	36	64.3	100	40.0
No opinion	38	32.5	19	24.7	4	7.1	61	24.4
Total	117	100.0	77	100.0	56	100.0	250	100.0

An association was found between the attitudes toward the order and the number of acres of potatoes produced in 1950. About one-third of growers with fewer than 10 acres of potatoes and only seven per cent of those with 20 acres or more had "no opinion" regarding the program. This would indicate that many of the growers with the small number of acres might not have been in close contact with the order and, therefore, knew very little about its operation. In many instances these growers sold their potatoes to a country dealer or other type of handler who would come under the regulations. Those growers with the larger acreages possibly handled their own potatoes and, therefore, came in closer contact with the

terms of the marketing order. The great opposition by these men unquestionably stems from the government regulations which made the sale of Grade No. 2 potatoes illegal and required handlers to have federal inspection on all shipments. The inability to sell lower grade potatoes would present a more difficult problem to the grower with the larger production. The farmer with a smaller production would use a large proportion of his lower grades for home use and for seed.

As was the case regarding attitudes toward the price support program and the vote on the marketing order, there was a very significant association between agreement with the order and distance from the market (Table 52). A majority of the growers having an opinion in Marketing Districts One and Two were in favor of the operation of the order, while the growers in Marketing District Three were opposed to it. As stated previously, this association undoubtedly is linked to the fact that as the distance from terminal markets increases the higher grade potato has a higher price relative to the lower grade. This is because the costs of transportation are practically the same regardless of the grade. Therefore, an order prohibiting the sale of lower grade potatoes will have less effect as the distance from the terminal market increases. The growers close to market have available outlets for No. 2 potatoes.

Another interesting observation in Table 52 is that the percentage of growers who stated that they did not know decreased in proportion to the distance to the center of population. That is, the nearer the grower to the center of population, the more likely he was to have an opinion. One-third of the growers in Marketing District One, one-fourth in District Two, and one-fifth in District Three indicated they had no opinion. Apparently

the growers further from market had less contact with the regulations since they probably sold their potatoes to country dealers who, as handlers, came under the terms of the order. About 62 per cent of the farmers who did not belong to farm organizations favored the order's operation while there was only 47 per cent approval among those in the entire sample who indicated an opinion. The greater support from non-organizational members may be explained undoubtedly by the fact that the growers in the Upper Peninsula were more in favor of the order and many farmers in this section did not belong to organizations. The Grange and Farm Bureau are not organized in this area and Farmers' Union locals are scattered.

TABLE 52

Comparison of Growers' Location and their Approval of the Operation of the 1950 Marketing Order

Opinion regarding order	Marketing District					
	One		Two		Three	
	No.	Pct.	No.	Pct.	No.	Pct.
Favor	21	58	47	41	21	21
Against	3	9	37	33	60	59
Did not know	12	33	29	26	20	20
Total	36	100	113	100	101	100

Seventy per cent of those growers favoring the support program and having an opinion regarding the operation of the order were in agreement with it. Perhaps they were in agreement because the order's operation permitted them to receive the "benefits" of price support.

As might be expected, the majority of those who voted for the order in 1950 favored its operation on that crop. However, 23 per cent of these growers were disappointed with the operation. They may have voted for the supports rather than the marketing regulations. More than four-fifths of those voting against the order were opposed to its operation.

Despite the fact that many stated that the growers were really voting on the issue of price support in 1950, the above results would indicate that many growers still had in mind the provisions of the order and they were either for or against it. However, as reported previously, there was a high degree of significance between those favoring both the support and order programs. No association was discovered between the attitudes towards the order and age, year started farming, type of farmer, investment in potato equipment, price received in 1950, compliance with acreage allotments and the quantity sold to the government.

After his opinion regarding the order's operation in 1950 had been determined, each grower was asked why he did or did not favor it. Three-fourths of those favoring the program did so because it kept inferior potatoes off the market (Table 53). This was one of the chief objectives of the program. Many of the inferior potatoes were kept off the market but perhaps the main reason was that the government was paying the same price for Grade No. 2 as Grade No. 1. Furthermore, competitive conditions would have prevented many of those potatoes from going to market. Potatoes from the Upper Peninsula had to be of the better grades because the handlers could not afford to ship lower grades. Consumers were in a better position to demand higher grades because of excessive supplies. Other reasons given for favoring the order were the following: it helped to keep large supplies

off the market in surplus years, insured a better price for the potatoes, and, provided the government supported the inferior potatoes, it was fine.

TABLE 53

Reasons Given for Favoring the 1950 Marketing Order

Reason	Number	Per cent
Inferior potatoes were kept off market	67	75
Helped to keep large supplies off market	8	9
Better price received for potatoes	6	6
Fine as long as govt. purchased off grades	4	5
Other	4	5
Total	89	100

While only five per cent of the growers stated that the program was fine as long as the government bought the lower grades, it is a very important reason. If a marketing order is to be successful in production areas close to market, satisfactory outlets must be available for grades which cannot be sold legally. Otherwise, enforcement will be made more difficult and many shippers will pack just over the tolerance allowed under the order.

About one-third of the producers disliked the order because of the red tape and governmental interference (Table 54). Many farmers prefer to make their own decisions and are violently opposed to rules and regulations being handed down to them. One-fifth of the farmers felt that the lower grades should be allowed to be sold as there was a demand for them and many poor families could afford to purchase them only. A few were

apparently aware that other states not under the order were benefiting and that the southern areas had an advantage in being allowed to ship a lower grade.

TABLE 54

Reasons Growers Disliked the 1950 Marketing Order

Reasons	Number
Too much red tape or government interference	32
Made it illegal to sell lower grades	20
Only political and cannot be enforced	9
Did not affect growers too much	8
Different rules in various states and areas	7
Inspection and inspectors were poor	6
Grades were not fair	6
Cost was too great for results	4
Other	8
Total	100

The results of the program were said by a few not to compensate for the costs of the mandatory inspections. Inspection costs were an added expense to many of the Michigan shippers because a much smaller proportion of the shipments had been inspected previously. This additional cost was rather burdensome to the conscientious producer. There was some complaint that the inspection service was very poor. Because of the increase in inspections which were required by the order, there were not enough inspectors readily available to all shipping areas. In addition, since they lacked experience and training, many of the inspectors were said not to have been qualified.

Despite the fact that the larger percentage of the growers were opposed to the operation of the order, one-half of the producers stated that they believed in the principle of marketing orders. In Table 55 are shown the answers to the question, "Do you believe that a majority of the potato producers should have the right to decide for each potato producer what grades that he can sell?". There was a high degree of association between the attitudes toward the order and the agreement with the principle.

TABLE 55

Comparison of Attitudes Toward the Operation and the Principle of Marketing Orders

Attitude Toward Principle	Attitudes toward Order: Favor No.	Favor Pct.	Against No.	Against Pct.	Did not know No.	Did not know Pct.	Total No.	Total Pct.
Favor	65	73	29	29	31	51	125	50
Against	19	21	64	64	24	39	107	43
Did not know	5	6	7	7	6	10	18	7
Total	89	100	100	100	61	100	250	100

A large number of those growers who did not know how they regarded the operation of the order indicated they favored the principle. These results suggest that if potato growers were informed concerning the real meaning of the marketing order, support and cooperation by the producers would be wider. Thomsen states in his book Agricultural Marketing that a "much more agressive and more broadly educational program to acquaint producers and handlers with the possibilities of federal marketing programs" is necessary. He adds:

> The Department infrequently has taken the initiative in pushing marketing-agreement and -order programs; and the state agencies, not being directly involved, have shown surprisingly little interest. Few farmers have more than vague notions of what the programs are or can do.[4]

Somewhat similar associations were found in regard to the principle of marketing order as were discovered in relation to the attitude toward the operation of the order. The majority of the growers located in Marketing District One and those favoring the support program agreed with the principle. The majority of those opposed to the support program, those with 20 acres or more of potatoes, and those with investment over $1,500 in potato equipment, were against the marketing order principle.

Reasons for the growers' attitudes toward the principle of marketing orders are shown in Table 56. Many of the growers suggested that the Michigan potato industry needed to do something to improve the quality of potatoes marketed. More than 40 per cent of the farmers approving the orders thought that only No. 1 Grade should be sold. One-fifth thought that some type of rule should be established so that better grades would be sold. Others considered the entire structure of the order to be a very democratic process because all growers were allowed to vote and required majority, if obtained, should rule. These men failed to realize that actually the minority rules, because 35 per cent of the growers voting may prevent an order from being placed in effect. Furthermore, if an order is placed in effect, there is no compromise for those who fail to approve it.

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4 F. L. Thomsen, Agricultural Marketing, New York, McGraw-Hill Book Company, Inc., 1951, p. 462.

TABLE 56

Reasons for Attitudes Toward Principle of Marketing Order

Reason for Attitude	Number	Per cent
Favored principle of marketing orders		
Only Grade No. 1 should be sold	53	42.4
Democratic process--majority should rule	38	30.4
Some rules must be established	26	20.8
Other	8	6.4
Total favoring	125	100.0
Against principle of marketing order		
Individual should run own business	43	40.2
Sell everything you grow	18	16.8
Producers might have only poor grade	12	11.2
Afraid big growers would get control	9	8.4
Poor people can only buy No. 2's	8	7.5
Not in favor of compulsory inspection	7	6.5
Other	10	9.4
Total opposed	107	100.0

Those in opposition suggested various reasons for their attitudes but 40 per cent stated that the individual farmer should run his own business. Many farmers looked with disapproval upon the interference by the government into their business. Many stated that they had started farming mainly in order to make their own decisions. Those men opposed to compulsory inspection would also be placed in this category.

The reason "producers might have only poor grades" indicates that the growers had very poor information regarding the order. In the North Central order and most potato orders there was a "hardship" clause which permitted those growers who had a crop low in Grade No. 1 to obtain permission to market approximately as many potatoes as the average grower. This does result

in a slight breakdown in the effectiveness and purpose of the program. It is often suggested that human food is being destroyed when the lower grade potatoes are withheld from market. However, very few farmers mentioned that their reason for opposition to the principle of marketing orders was that the lower grade potatoes should be sold because some people could afford only this grade. This is another indication, in addition to the reasons of opposition to the support program, that farmers, in periods of favorable prices, think mainly of their loss of freedom and are not concerned with factors that do not directly harm them.

Marketing Quotas

In 1950 it was evident that there were many short-comings to the potato support program. The Secretary had reduced supports to the lowest limit possible. He had required the availability of price support to be dependent upon the use of marketing agreements and marketing orders. Still, there were grave problems of disposition as well as of expenditure of excessive public funds. Congress realized that changes had to be made in the price support program. As a result, Congress was considering the authorization of marketing quotas for potatoes which would have been a form of production control or an attempt to control total sales. In the first session the Committee on Agriculture of the House of Representatives considered a marketing quota bill (H.R. 5751) for potatoes. During the second session of the 81st Congress the Senate Agricultural Committee held hearings on two bills (S. 2634 and S. 3049) and recommended the latter for passage.

The quota legislation considered for potatoes was similar in many respects to that provided for the basic commodities in the Agricultural Act of 1938. It provided that a national marketing quota be established and broken down into state, county, and farm quotas. It also provided that such quotas would be converted into acreage allotments similar to the procedure for most of the basic commodities. A penalty of 50 per cent of parity was to be established on potatoes marketed in excess of the quota.

There were a few important exceptions or changes from the quota provisions for the basics. In the case of potatoes, the Secretary could have assigned quotas with or without acreage allotments. The latter form, a change from present provisions, would provide a total quantity of potatoes that could be sold from the farm. In other words, it would be an attempt to prevent the compensating of reduced acreage allotments by increasing the yield per acre as a result of improved production methods. This was not a new proposal, for the 1949 Resolutions of the American Farm Bureau Federation suggested that a study be made as "to the advisability of substituting bushelage allotments for acreage allotments and marketing quotas for wheat."[5]

The Secretary also requested authority to decrease the quotas for any state or area by a standard factor, not to exceed 20 per cent. This was said to be necessary in order to cope with crops in which the yields were excessive. In other words, the Secretary would have the privilege of reducing a farmer's quota by one-fifth after the crop had been planted.

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[5] Resolutions Adopted at the 31st Annual Convention of the American Farm Bureau Federation, 1949, p. 16.

The major reason for these differences in quota provisions was that potatoes are a perishable commodity and any excess or surplus could not be carried forward for disposition in later marketing seasons. With a storable commodity it is not necessary that production be brought exactly into line with needs each year as the carry-over could provide a buffer against shortages in future crops. However, if large quantities are in storage, the government may be forced to announce drastic reductions in quotas on future crops. Potato growers are not plagued by carry-over supplies from the previous year's crop.

As was mentioned in connection with marketing agreements, there would be considerable difficulties of enforcement connected with the operation of potato marketing quotas. Potatoes do not move through centralized markets or "bottlenecks" because the commercial movement of potatoes fans out from the grower in almost every conceivable manner. Sales by growers vary all the way from unharvested potatoes in the field to graded, sacked, and loaded potatoes which are trucked by the grower to dealers, retail stores, or house-to-house delivery. Because of the many methods of sale, it would be impractical in most areas to administer marketing quotas based on the volume sold by growers. Perhaps the same argument might be used in the case of wheat and corn, for which the outlets are numerous. However, cotton and tobacco are marketed through relatively few outlets, such as gins and auctions.

The weakness or difficulty of establishing quotas based on farm acreage allotments is the extreme range in yields which might be used to translate the quotas into acreage. For example, the 1950 yield per acre was more than 10 per cent greater than the 1949 yield in the United States. Therefore, it would appear very easy to make an error of 10 per cent between the projected

and actual yields per acre. Such a miscalculation could result in an excess production of about 35,000,000 bushels of potatoes.

The American Farm Bureau Federation had a rather inconsistent attitude toward quotas for the non-basics. Its 1949 Resolutions recommended "that authority be provided for the establishment of marketing quotas on the non-basic commodities subject to the approval of two-thirds of the affected producers".[6] Yet in a letter dated April 4, 1950, to the Chairman of the Subcommittee on Potato Legislation, Mr. Allan B. Kline, President of the American Farm Bureau Federation, stated, "We have serious misgivings relative to the practicability of marketing quotas for a perishable commodity such as potatoes."

While the Senate Agricultural Committee approved the quota provisions for potatoes, the bill was not presented for Senate vote in 1950. The House did not consider a quota bill in 1950. As marketing quotas were not authorized for potatoes, they could not be presented to the growers for a referendum vote. Thus, the price support died as the conditions established by Congress for its continuance could not be met.

To determine the growers' opinion regarding quotas the following questions were asked:

> "There has been some discussion of using marketing quotas in connection with price support programs. Would you mind telling me just what the term 'marketing quota' means to you?"
>
> "Do you believe that a majority of the potato producers should have the right to decide for each potato producer the amounts of potatoes that he can sell?"
>
> "Why(or why don't) you think this?"

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6 American Farm Bureau Federation, loc. cit.

Slightly more than 40 per cent of the growers signified a knowledge of marketing quotas (Table 57). One-half of the growers readily admitted that they did not know the meaning of the term. Fifty-five per cent of the Farm Bureau members were familiar with the term. Perhaps the Farm Bureau members had participated in discussion of quotas in their monthly council meetings. Only one-fourth of the growers in Marketing District One had a fair knowledge of quotas. This fact is very closely related to the farm organization factor as the Farm Bureau has not become organized in the Upper Peninsula.

TABLE 57

Farmers' Knowledge of the Term "Marketing Quota"

Knowledge indicated by answers	Number	Per cent
Excellent knowledge	10	4.0
Some knowledge, not in detail	96	38.4
Gave answer, entirely wrong	17	6.8
Did not know	127	50.8
Total	250	100.0

There was no association between knowledge and membership in the other farm organizations or no farm organization, age of the farmer, type of farmer, attitudes towards the program, size of potato acreage, production practices, or investment in potato equipment. Over three-fourths of the growers were opposed to the principle of quotas (Table 58). The greatest support for the basic doctrine of quotas came from the same growers who favored the marketing order principle and those who favored the support

program. While the majority of these growers were opposed to the principle of quotas, a larger percentage than in the entire survey favored it. Those opposed to the support program and the principle of marketing orders were overwhelmingly opposed to the order principle.

TABLE 58

Relation of Attitudes to Other Government Programs to that of the Principle of Marketing Quotas

Factor	Marketing Quota Principle				Total	
	Favor		Opposed			
	No.	Pct.	No.	Pct.	No.	Pct.
Entire Survey	50	21.5	183	78.5	233	100
Favor Support Program	28	39.4	43	60.6	71	100
Against Support Program	16	11.9	119	88.1	135	100
Favor Order Principle	43	36.2	76	63.8	119	100
Against Order Principle	5	4.8	98	95.2	103	100

It would appear from these results that many growers tend to favor all the government programs or to oppose all of them. Some men encourage the government and its employees to aid them in making production and marketing decisions while on the other hand many growers have the opposite feeling toward the assistance of the government. There was no association between the agreement with the principle of marketing quotas and knowledge of quotas, location of the farmer, age, type of farmer, membership in a farm organization, number of acres of potatoes, yield, production practices, or investment in potato equipment.

The reasons given for the attitudes regarding the principle of marketing quotas are shown in Table 59. The main reason for favoring the quota

principle was similar to that given for marketing orders: that is, as long as everyone has the right to vote, the majority should rule. Other reasons were that quotas aid in cutting down the supply and that they tie in well with price supports.

TABLE 59

Reasons for Attitudes Toward the Principle of Marketing Quotas

Reason for attitude	Number	Per cent
Favored principle of marketing quotas		
Democratic process--majority should rule	23	46
Cuts down on supply so increases prices	14	28
Ties in well with supports	5	10
Other	8	16
Total favoring	50	100
Against principle of marketing quotas		
Individual should run his own business	106	57
Sell all that has been raised	44	24
Cannot be enforced	13	7
Supply and demand should establish price	8	5
Other	12	7
Total opposed	183	100

More than one-half of those opposed to the principle stated that this was a free country and the individual should be able to make his own decisions. The principle was considered to be too close to a form of dictatorship to suit many. Nearly one-fourth replied that if a grower produced the potatoes, he should have the right to sell them rather than allow them to go to waste. Although mentioned by only a few, the fact that the principle would be hard to enforce is very plausible. This is another instance in which the producer was mostly concerned with his loss of freedom.

If potato prices drop to a low level, he might be very willing to permit the government to make decisions in return for price security.

Implications for Policy

Marketing orders and marketing quotas are federal programs which are designed to increase the farm income from particular crops for which the demand is inelastic. This is accomplished by withholding some of the supply from the market. The smaller quantities to be marketed should result in larger total consumer expenditures and in the probability of larger net returns to the producers. In addition to the fact that the demand for a commodity must be relatively inelastic, it is also important for the successful operation of the program that it cover a major part of the commodity marketed. The latter situation did not prevail under potato marketing orders. Had legislation providing for quotas been passed by Congress and had been approved by growers, quotas would have been effective on a national basis.

Growers were found to be opposed to the operation of the 1950 marketing order but there was less opposition to it than to the support program. Much of the approval for the order came from those who also favored the price support program. The growers in the Upper Peninsula approved the operation of the order but those in Marketing District Three opposed it. As the lower grade potatoes will have a higher price relative to the better grades near the consuming markets than in the outlying territory, an order prohibiting the sale of low-grade potatoes has a greater effect on the producers nearer the terminal markets.

A large percentage of the producers in the Upper Peninsula indicated that they had no opinion regarding the order, as did those farmers with

fewer than 10 acres of potatoes. These producers are more apt to sell their potatoes to country shippers and others who, as handlers, are subject to the terms of the order. Therefore, these growers did not have close contact with the order and did not know about its operations. Nevertheless, these growers were permitted to vote on the order. The growers with the larger number of potato acres were opposed to the order and only a few indicated that they had no opinion about it. Undoubtedly these producers were, in most instances, handlers and therefore subject to the regulations.

A larger number of growers favored the principle of marketing orders than supported its operation. This would indicate that if more farmers were properly informed about the purpose and structure of orders there might be more support for them. The growers also serving as handlers would still very likely be opposed but the order might be put into effect despite unanimous opposition by the handlers. The main reason given for favoring the operation of the order and for support of the principle was that inferior or low grade potatoes should be kept off the market. The opponents stated that there was too much red tape and interference by the government and that persons should be allowed to run their own businesses.

More than one-half of the growers knew nothing of marketing quotas. This might be explained by the fact that quotas for potatoes were never presented to the farmers for approval. However, Farm Bureau members indicated a better knowledge than did members of other farm organizations or non-members. Only one-fourth of the men in the Upper Peninsula knew the meaning of quotas. As all commercial potato growers are permitted to vote on quotas, the proponents thought that the majority should rule and therefore

that the quota principle was satisfactory. The opponents replied that the United States is a free country and the individual should have the right to run his own business and sell all the potatoes that he produced. Several growers mentioned that quotas would be hard to enforce, which should not be overlooked by a person, because the marketing channels for potatoes are much too complicated to attempt to administer them. More of the growers who were in favor of the price support and marketing order programs were found to approve the quota principle.

These facts indicate that some farmers are more willing than others to accept government assistance in making decisions. These men were those located the farthest from market and those with the smaller acreages of potatoes. Undoubtedly the market restrictions had less effect on them. This might be the reason for their approval. Those farmers with the larger number of potato acres and those located closer to market were opposed to any type of government regulation.

CHAPTER VII

ATTITUDES TOWARD FUTURE PROGRAMS

The previous chapters have been concerned with growers' responses to and attitudes toward federal price support and marketing programs. While the majority of the growers indicated dissatisfaction with these programs, various questions were asked to determine their opinions regarding future programs.

In a mail questionnaire sent out in January, 1953, to each of the growers interviewed, the producer was asked what level of support he would desire for the 1953 crop. The responses are shown by Marketing Districts in Table 60. About 58 per cent of the growers who answered the question indicated that they favored no price supports for 1953. In the original survey 65 per cent of the growers having an opinion were against the potato program. As the percentage of mail return was the greatest from Marketing District One, where earlier results have shown that the growers were in more agreement with the government programs, there might have been a higher proportion against the program if all growers had completed the mail form.

Eighty-eight per cent of the growers favoring support for the 1953 crop desired the level to be set at 90 per cent of parity or above. This was the level of support for the crops from 1943 through 1948. Only five per cent of the producers desired supports at 60 per cent of parity for the 1953 crop. These results indicate that most potato growers either favor no

supports or desire a high percentage of parity guarantee. Very few growers wanted the same level of support as that maintained for the 1949 and 1950 crops.

TABLE 60

Type of Support Program Desired for 1953 Crop,

By Marketing Districts

Preference for 1953 crop	Marketing Districts						State	
	One		Two		Three			
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No supports	12	38	56	60	46	64	114	58
Support at 60 pct. of parity (about $1.03 per bushel)	1	3	8	9	1	1	10	5
Support at 90 pct. of parity (about $1.55 per bushel)	11	34	18	19	13	18	42	21
Support at 100 pct. of parity (about $1.72 per bushel)	8	25	11	12	12	17	31	16
Total answering	32	100	93	100	72	100	197	100
Didn't answer questions or return form	4		20		29		53	
Total in interview	36		113		101		250	

Growers were also requested to make a "guesstimate" as to the price they expected potatoes to be during the 1953 harvesting period. These price estimates were then compared with the support level desired by the grower. It might have been expected, for example, that those growers expecting a low price for the next season's crop would desire a support level higher than their guess. However, there was no association between the growers'

price estimates and their desire for support. This fact indicates that growers' opinion regarding price support is not influenced by the level of price they expect to receive for their commodity. Thus it might be expected that potato growers' attitudes regarding support would not change very much as a result of lower potato prices. These producers apparently have developed, through experience, a dislike for the regulations and interference that accompany a government support program. The growers also indicated on the mail questionnaire the farm organizations to which they belonged. There was no association between membership in the farm organizations and opinion regarding support of the 1953 crop. Attitudes of members of the Farm Bureau and Farmers' Union did not differ from the average of the entire study.

There was a significant association found in the answers from Marketing District One. More than sixty per cent of these growers desired a program for 1953. This fact is related to the association between attitudes regarding the former support program and the opinion regarding support for the 1953 crop. Of those answering the questionnaire, 72 per cent of the farmers who favored the program still desired supports and 71 per cent of those opposed to the former program continued to prefer no price supports. There were approximately equal percentages of producers who changed their minds.

The other associations were somewhat similar to those discovered in relation to the attitudes toward the support program as reported in Chapter V. A majority of the livestock farmers and of those who sold their entire crop to the government were still desiring a price guarantee. These two groups are closely related since about one-third of the livestock farmers

sold all their potatoes to the government in 1950. These farmers were probably desirous of obtaining more subsidized feed as well as ease in selling their potatoes. There was no relationship between the preference for a program and the number of potato acres, practices, age of the farmer, investment in potato equipment, or type of farmer other than livestock.

In each of the last 125 interviews the growers were asked, "Do you favor any federal price support or payments for potatoes?" The reply was more than two-to-one or 68 per cent against a program.[1] Only in Delta County was there a majority of farmers desiring a program. In each of the other counties in the latter half of the survey--Bay, Cass, Ingham, Jackson, Emmet, Otsego, and Manistee--there was a plurality against a program.

These results from the personal interview and the mail questionnaire indicate that the majority of potato growers did not want a price support program.

Types of Controls

In order to obtain information regarding the type of program growers might desire if one were later considered necessary, various questions were asked. Each of the first 125 persons interviewed and only those growers in the last half of the survey who favored price support were asked the following questions:

> "If farm prices are to be supported in periods of low prices, do you think some restrictions are necessary?"
>
> "If no - why do you say this?"
>
> "If yes - what type of restrictions would you prefer?"
>
> "Would you favor a program which took the form of direct income payments to potato growers instead of price supports?"

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[1] Yes - 40 farmers; no - 85 farmers.

There was practically unanimous feeling that some type of restriction was necessary if there were to be price supports. Acreage controls were considered the restriction most preferred (Table 61). This was followed by grade restrictions and then marketing quotas. It was interesting to note that the most lenient type of control was the most preferred. Growers realized that they could make most of their own decisions with acreage controls but marketing quotas would involve more interference by the government. Undoubtedly farmers also realized that acreage allotments, although called restrictions, did not materially affect their total production of potatoes.

TABLE 61

Type of Restrictions Preferred by Producers*

Opinion	Acreage Control		Grade Restrictions		Marketing quotas	
	No.	Pct.	No.	Pct.	No.	Pct.
Recommended	97	68	48	34	37	26
Not recommended	46	32	95	66	106	74
Growers answering	143	100	143	100	143	100

* Growers could suggest more than one method of restriction.

Method of Payment

The method of support for agricultural commodities received public attention after Charles Brannan, former Secretary of Agriculture, presented his price support program to Congress in 1949. Actually, his production payment idea was not new because the Agricultural Act of 1948 provided for

this method of support and many agricultural economists had previously advocated it. In addition to recommending production payments for the perishables, the former Secretary of Agriculture suggested their use as a supplementary measure for support of the storable commodities. Evidently he realized the limitations of his suggestion as he further requested that direct purchase programs for perishable commodities should also be available for use. The latter was necessary, according to his testimony, to make it possible for the Government, in periods of seasonal gluts of fruit and vegetables, to make direct purchases and divert supplies from normal trade channels.

Regarding the principle of production payments, the farm organizations took their usual positions upon issues of farm price support. The Farmers' Union gave its unqualified support to production payments. The National Grange, usually attempting to please both sides but still promoting its two plans for a Federal Farm Commission and a two-price system for agriculture, felt that production payments might be necessary in periods of emergency or adjustment provided that their use were safeguarded by recommendations of a Federal Farm Commission. The American Farm Bureau Federation, in contrast to the Farmers' Union, took a definite stand against the principle. Their 1949 resolutions state, in part, "Government payments to farmers are not a desirable substitute for price supports or a satisfactory means of bringing income into agriculture. Farmers are entitled to receive fair prices in the market place."[2]

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[2] American Farm Bureau Federation, op. cit., pp. 14 and 15.

There has been much discussion regarding the pros and cons of direct payments. However, very few have pointed out that elasticity of demand of the commodity concerned is an important factor regarding the income benefits of the program to the farmers and the cost of the program to the government. One might immediately raise the question about the cost to the consumer. Karl Fox states that "from a practical standpoint, costs to Government are scrutinized much more closely than are costs to consumers. So far, the concept of 'social cost' (to taxpayers and consumers combined) has won little political acceptance."[3]

In an earlier chapter, the demand for potatoes was shown to be inelastic. It was pointed out that if the demand for a commodity be inelastic, the total value of a particular crop to the farmer may be increased by withholding some of the commodity from the market, provided that the demand remain unchanged. Under the production payment plan the potato farmer would be required to sell his potatoes in the market place. He would secure a payment of the difference between the support price and the market price for the quantity sold. Through the purchase method of support as previously used, potatoes are withheld from market through government purchases, in an attempt to maintain market price for potatoes.

The situation is very ably described by O. C. Stine of the Twentieth Century Fund when, referring to potatoes, he said, "A support level, corresponding to that in effect before supports were abandoned with only payments in support of returns to growers, could produce a supply that would

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[3] Karl Fox, "The Measurement of Price Support Costs," Journal of Farm Economics, Volume XXXIII, (November, 1951), Number 4, Part 1, p. 482.

reduce the prices paid in the local market in concentrated producing areas to zero. The consumers would pay the cost of transportation and handling and the government would pay the entire returns to farmers. I do not think this would be acceptable to farmers or to the public."[4]

A formula for measuring the differences in cost between a purchase and a production payment program has been developed by Karl Fox. This formula is as follows:[5]

$$\frac{L_p}{L_c} \cong \frac{\bar{R} - \bar{n}}{\bar{r}}$$

where $\bar{R}$ is the average ratio of final net losses to the initial purchase costs, $\bar{n}$ is the average elasticity of demand for the commodity, and $\bar{r}$ is the average percentage of production which is eligible for compensatory payments.

Mr. Fox concludes that the lost ratio, $\bar{R}$, in the case of perishables may sometimes be equal to or greater than one, but demand for some perishables is so inelastic that purchase and diversion methods will still involve less cost to Government, after a given supply has been produced. He adds that where the demand is very inelastic, a small outlay for government purchases will have a much larger effect on farm income. In contrast, cash benefits to farmers in the form of compensatory payments will be the same as costs to Government, excluding administrative expenses.

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4 O. C. Stine, "Agricultural Price Policy - Discussion", Journal of Farm Economics, Volume XXXIV, (December, 1952), No. 5, pp. 628-629.

5 Fox, op. cit., p. 482.

Two of the principal advantages often attributed to direct payments certainly would not apply to potatoes. It is often stated that consumption would be encouraged through direct payments. However, as the demand for potatoes is very inelastic, this argument loses much of its importance. The other is that direct payments encourage the exportation of the agricultural commodity or discourage the importation of the commodity into this country. The United States exports very few potatoes because they cannot be transported eonomically due to their perishability and bulkiness. And relatively few table stock potatoes enter this country.

Growers indicated a slight margin of approval for direct payments since 53 per cent of 111 men having an opinion favored this method of support.[6] The reasons for their answers regarding the method of support are shown in Table 62.

The thoughts regarding the method of payment reveal practically the same advantages for each side. An approximately equal percentage of growers were of the opinion that one method would be easier than the other to administer. Farmers on both sides thought their recommendations would eliminate the advantage which the growers with large acreages are supposed to have. Those preferring the diversion method stated that the growers with the large acreage would be in a position, in periods of surpluses, to market their products and thus get the direct payment. The grower with the smaller acreage would not be able to obtain a sales receipt.

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[6] The first 125 interviewees and only those favoring price supports in the last set of interviewers were asked their opinions regarding the method of support. Many farmers in the first group of 125 interviewees were so opposed to the support program that they refused to indicate a choice of method for fear that it would appear that they desired a price support plan.

TABLE 62

Reasons Given for Desiring Certain Methods of Support

Reason	Number	Per cent
Direct payments		
Like to see potatoes sold to the consumer--avoid waste	17	29
Easier to administer, work better	16	27
Fairer to consumer	6	10
Eliminatebig growers' advantage	4	7
Wouldn't cost as much	3	5
Other	13	22
Total	59	100
Diversion method		
Liked the way it worked previously	17	33
Easier to administer, less red tape	15	29
No bottom to price under direct income payment--too costly	7	13
Other program would favor larger grower	7	13
Other	6	12
Total	52	100

A few of those in opposition to direct income payments were fearful of the level to which potato prices might fall under such a program. Growers in periods of surplus crops would be interested in obtaining the sales receipt so that they could receive a subsidy. A rather weak excuse for favoring the former method of price support was indicated by the largest per cent. As long as their affairs progressed smoothly, they did not favor a change.

The principal argument supporting direct payments was the "stock" one usually given, i.e., that the potatoes should go to market and thus avoid being wasted. It is very unlikely that the market for potatoes would increase greatly if surplus crops were supported by direct payments, as the demand for

this commodity is highly inelastic. There was no association between preference of method of support and location, number of potato acres in 1950, use of the government support program in 1950, approval of marketing order, type of farmer, member of farm organizations, or investment in potato equipment.

Restriction in Amount of Payments

It will be recalled that Mr. Brannan, in his proposal to support prices of agricultural commodities, suggested that the production of a commodity from a farm in excess of a certain amount not be eligible for support. It was his opinion that a limit was necessary so that public funds would not be used to encourage the development of extremely large-scale, industrialized farming. According to the proposed formula, a potato grower would receive support only on the first 16,524 bushel he produced. Based on the state's average yield per acre in 1952, this would include the production from a 90-acre potato farm in Michigan and a 35-acre potato farm in Maine. Naturally one can see the area conflicts that would arise from such a limitation.

The American Farm Bureau Federation was opposed to such a unit limitation. The 1949 Resolutions of this organization suggests that this restriction would place a ceiling on opportunity in agriculture which would result in penalizing efficiency and that as a result, food prices would eventually reflect such inefficiency. It was also stated that, "Such a limitation would be a dangerous precedent--an opening wedge which eventually would result in Government-supervised and permanent agricultural poverty."[6]

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[6] American Farm Bureau Federation, loc. cit.

According to the Farm Bureau, there must be economies of scale above the quantity of production that would receive support.

In an especially prepared brochure regarding the Brannan Plan, it was stated that the limitation on the amount of support per farm was not new in principle as Congress had previously set limits on the amount of aid that could be given any one farm under agricultural programs.[7] Growers were asked, "If there is to be a support program, should there be a limit on the total amount of money that a potato farmer could receive from the government under the support program?"

Of those growers indicating an opinion, 80 per cent agreed with Mr. Brannan that a maximum limit should be established on funds permitted to be received by a grower (Table 63). Evidently the growers were influenced by the series of syndicated newspaper articles by John Ball, reporter for the Washington Post, which appeared in the summer of 1949 and spotlighted the large government checks paid 31 Maine potato growers for surplus potatoes. There was a significant association between the growers' attitudes regarding the restriction and the number of acres of potatoes which they cultivated in 1950. Only 13 per cent of those growers with fewer than 10 acres were opposed to the limitation but 52 per cent of those having 30 acres or more of potatoes were against the limit on funds that could be given to farmers (Table 62).

The grower with the larger acreages realized that perhaps such a program would discriminate against him. He would be permitted to sell to the government or to receive a subsidy on a certain quantity of potatoes. Such

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[7] United States Department of Agriculture, Questions and Answers on the Proposed Price Support Program, USDA 933-49, p. 9.

TABLE 63

Growers' Attitudes Toward Restriction on Support Funds Compared with Number of Acres of Potatoes in 1950

Restriction of funds	Acres: Less than 10		10 to 30		30 or more		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
For	98	87	72	83	15	48	185	80
Against	15	13	15	17	16	52	46	20
Total	113	100	87	100	31	100	231	100

a program would probably tend to reduce the trend of potato production to larger farms in specialized areas. Several of the growers in opposition stated that such a maximum limit would provide a subsidy for inefficiency. They contended that the production of potatoes on large acreages was more efficient than on small acreages. The majority felt that a restriction would discourage many men, who were not normally potato raisers but had large amounts of capital, from entering the industry in order to sell large quantities of potatoes to the government. In many sections of Michigan the interviewees would refer to an instance in their area in which, as a result of the potato price support program, a banker or other type of non-farmer had rented or bought land in order to produce many acres of potatoes, and, when the supports were removed, discontinued his potato operations. Opinion of the members in the Farm Bureau were no different from those in the entire survey. This would indicate that the Farm Bureau policy did not coincide with the thoughts of their members. There was no association between

the desire for a restriction and location of the farmer, type of farmer, or membership in farm organizations.

Marketing Programs

In the recent discussions by Congress regarding potato price support programs, the members were considering that farmers must approve marketing orders and marketing quotas in order to receive price supports. As stated in the previous chapter, the marketing programs are used as a means to withhold supplies from market. The majority of growers indicated that they were opposed to the operation of the marketing order in 1950. They favored the principle of orders and were against the principle of marketing quotas.

In order to determine whether they were willing to accept these programs as a means to receive supports or to obtain orderly marketing conditions, the following questions were asked the growers in the spring of 1952:

> "In order to receive support for potatoes at 1950 levels, would you vote for a federal marketing order for potatoes in Michigan today?"
>
> "In order to receive price supports for potatoes at 1950 levels, would you vote for marketing quotas for potatoes?"

If Congress had provided marketing quotas for potatoes and conditioned price support on the approval of the two forms of marketing controls, Michigan's potato growers probably would have voted against them (Table 64). If the number indicating that they "did not know" were added to the number who would vote "yes", there would be much less than the two-thirds affirmative vote which is required for the adoption of orders and which has been the requirement for those commodities eligible for quotas. This does not mean that Michigan would not have had such programs since the required majority of producers voting might have been obtained in the other states under the marketing order or in the nation.

TABLE 64

How Growers Would Have Voted in 1952 on Marketing Orders and Quotas as a Condition of Receiving Price Support

Vote	Marketing Orders		Marketing Quotas	
	No.	Pct.	No.	Pct.
Yes	59	23.6	40	16.0
No	169	67.6	155	62.0
Didn't know	22	8.8	55	22.0
Total	250	100.0	250	100.0

There was a significant relationship between the grower's vote in the 1950 and 1951 referendums and the indication of his vote for 1952. Producers who had voted in opposition to the order were still almost unanimously opposed to it. Although the majority of those who had supported the order on previous votes would still favor the order program, a large percentage would have voted against the plan in 1952 (Table 65).

The relationships again indicate that farmers have definite judgments regarding the government and its programs. Two-thirds of those who would vote for marketing quotas would also favor orders. However, almost 90 per cent of those averse to quotas and of those against the support program were opposed to orders (Table 65). Slightly more than one-half of those favoring the support program stated that they would vote in opposition to the order with supports at the 1950 level. Many of these stated that they preferred the support level to be at the 90 per cent of parity level rather than at 60 per cent of parity as in 1950.

TABLE 65

Associations Between How Producers Might Vote on a Marketing Order And their Support of Federal Programs

Factor	Would you vote for marketing order? Yes No.	Yes Pct.	No No.	No Pct.	Total No.	Total Pct.
Entire survey	59	26.0	168	74.0	227	100
Voted for order in 1950	35	54.7	29	45.3	64	100
Voted against order in 1950	1	1.6	62	98.4	63	100
Voted for order in 1951	16	64.0	9	36.0	25	100
Voted against order in 1951	5	7.5	62	92.5	67	100
Would vote for quotas	25	65.8	13	34.2	38	100
Would vote against quotas	19	13.0	127	87.0	146	100
Favored price supports	36	46.8	41	53.2	77	100
Against price supports	19	13.0	127	87.0	146	100

While there was no relationship between knowledge of quotas and those who indicated whether they would vote "yes" or "no" regarding quotas, there was an association when those who indicated that they "did not know" were also considered. Of those growers who indicated knowledge of quotas, 21 per cent would approve them to receive supports, 76 per cent were opposed, and 3 per cent "did not know". The replies of those men not knowing about the meaning of the term were 14 per cent in favor, 60 per cent against, and 26 per cent "did not know".

Promotional Tax

In addition to determining growers' attitudes toward various federal programs, their opinions regarding a self-help program were requested. As several potato areas, including Maine and Idaho, and more recently the Red River Valley, have enacted compulsory taxes for potatoes, the growers were asked the following question: "Would you favor a state tax on potatoes at, say, one cent per cwt., to be used for the advertising and promotion of Michigan potatoes?". Answers are shown in Table 66.

More than three-fourths of the growers replied in the affirmative. Most of the growers had definite thoughts on this question since fewer than two per cent were not sure of their attitude. Those growers favoring such a tax pointed to the apparent success of the Maine and Idaho advertising programs. Furthermore, many felt that the Michigan potato industry would have to do something if Michigan potatoes were to compete with the potatoes from these and other states. Some of the growers in opposition pointed to the dissension among apple growers concerning the benefits derived from the tax on apples. Many also suggested that the administrative problems in the collection of such a tax would be insurmountable.

TABLE 66

Growers' Attitude Toward a Tax on Potatoes

Attitude	Number	Per cent
Favor	191	76.4
Against	55	22.0
Do not know	4	1.6
Total	250	100.0

There was no significant association between opinions regarding the tax and location of the farmer, per cent of productive man-work units in potatoes, type of farmer, membership in farm organization, size of potato acreage, production practices or investment in potato equipment. It was evident from the survey that growers placed a great deal of faith in the success of a promotional program for potatoes. Furthermore, at a growers' meeting in Montcalm County in 1952 it was reported that there was unanimous approval of a promotional program for potatoes.

Many agencies have attempted to evaluate the affects of advertising in the agricultural field and have made excessive claims regarding the results. However, it has been shown that these claims were based on erroneous statistical procedures.[8] These studies were said to be distorted so as to make the farmers and farm organizations believe that advertising was the answer to marketing problems.

Thomson in his recent book on Agricultural Marketing indicates that the acceptance of advertising by farmers shows how easy it is to convince people that what they want to believe is true. He continues, "Actually, there has been little or no convincing evidence that advertising of unprocessed, unbranded farm products has any appreciable effect upon consumer demand; on the contrary, there are some very convincing a priori reasons for believing that in most cases such advertising does not yield returns equal to its cost."[9]

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[8] Alois F. Wolf, "Measuring the Effects of Agricultural Advertising", Journal of Farm Economics, Vol. 26, No. 2, May, 1944, p. 327.

[9] F. L. Thomsen, Agricultural Marketing, McGraw-Hill Book Company, Inc., New York, 1951, p. 342-343.

The late John R. Van Arnum, Secretary of the former National League of Wholesale Fresh Fruit and Vegetable Distributors, in his annual report in 1940 stated, "that the costs of national promotional campaigns are prohibitive and that certain inherent difficulties tend to make such a campaign impracticable. Among these inherent difficulties are the competition and rivalry between producing districts, the competition of commodity with commodity, the substantial investment in well established brands which have been built by the enterprise of certain producers and shippers, the thousand-and-one self interests, and, finally, the very diversity of personnel in the industry."[10]

In advertising it is essential that the commodity being promoted must be easily identified by the consumer when he visits the retail store. It would be very difficult to distinguish the Michigan potato from one produced in Ohio or Wisconsin. This might be done through the consumer packaging of all Michigan potatoes under one brand and certainly this does not appear very practical for many reasons, the chief reason being that uniform quality is a prerequisite in the use of a brand and that it would be next to impossible to achieve in Michigan with such a large production area and the large number of growers. In addition, Michigan is raising too many different varieties of potatoes to develop a quality marketing program. Each purchase of Michigan potatoes by a consumer has a "grab-bag" effect because each variety cooks differently, tastes different, and the final appearance may

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[10] Annual Report of the Secretary and the Transportation Secretary, National League of Wholesale Fresh Fruit and Vegetable Distributors, 1940, pp. 21 and 22, cited by Alois F. Wholf, op.cit., p. 347.

be different. Idaho has a distinct advantage in many respects as it produces one variety of potato, which is used mainly for baking. In addition, no other area has been economically successful in the production of the Russett Burbank, the Idaho variety. As Idaho is located some distance from the markets, it does not pay the Idaho shipper to send lower grades to market. This fact, also, makes it easier to develop a quality marketing program.

Some growers in two Michigan counties, Bay and Emmet, have organized potato marketing cooperatives. Potatoes are being sold under the brand names of the cooperative. Even in these small areas and with a small number of members in each organization, problems have arisen concerning maintenance of uniform quality. The cooperatives have attempted to allow each grower to pack his own potatoes in sacks furnished by the organization. However, each grower has different thoughts regarding quality. Standardization of potato quality, which would be necessary for successful promotional activities, would be difficult to achieve because it varies so much with the different crop years. In addition, the quality very often changes as potatoes move through the marketing channels from the grower to the consumer.

All of these reasons suggest that a promotional program for Michigan potatoes financed by funds raised from the growers might not be successful. Therefore, it is very important that the producers be told of the inherent disadvantages of such a program before they become victims of commercial advertising firms. Producers already have the notion that advertising is the answer, so they could very easily be influenced into demanding that the state legislature enact a potato tax.

Implications for Policy

The majority of potato growers do not desire a price support program for their product. However, those desiring a program prefer the support level to be established at 90 per cent of parity or above. There was no association between the desire for a support program and the price that the farmer expected to receive for potatoes, nor was there any relationship between it and the membership in farm organizations. The producers in the Upper Peninsula were interested in a continued program of support.

These results indicate that the growers close to the commercial markets are not desirous of a program while producers located further from the urban centers are interested. It might be expected that the greatest demand for a support program for potatoes in the United States would come from growers located in the Red River Valley, the state of Washington, and other areas located some distance from the centers of population. The farmers in the producing areas near to markets such as the Eastern shore, Long Island, Upstate New York, Pennsylvania and Michigan would be opposed to such a plan.

There was almost unanimous opinion that any plan of price support must be accompanied by some type of control. As individuals inherently desire the restrictions which have the least effect on their own practices, farmers favored acreage controls. Marketing quotas, the most drastic control, were recommended in the fewest instances.

A slight majority of those favoring supports desired the direct payment method because they thought that the surplus potatoes should be made available to the consumer and, also, that such a method of payment would be easier to administer. These growers were not aware that undoubtedly the free market price of potatoes would drop to extremely low levels if

the surplus supplies were placed on the market, since the demand for potatoes is highly inelastic. The fact that the demand for many agricultural products is inelastic and the consequences of this principle should be explained to farmers so that they will not become victims of something that they do not understand but still advocate.

Another of Mr. Brannan's suggestions was to place a limitation on the amount of support funds that a farmer could receive. He received little public backing for this recommendation. However, the potato growers in Michigan were very much in accord with such a maximum but the majority of those with 30 acres or more of potatoes in 1950 held the opposite opinion. The latter group of growers decided that such a scheme would subsidize inefficiency and tend to slow the movement of potato production to larger farms in specialized areas. The growers in agreement with the suggestions apparently were angered by the press reports and rumors that many growers were receiving excessive amounts of money from the government. They inferred that these growers were newcomers to the industry. The government should have investigated such reports and attempted to refute the statements if they were not true or explain why some growers were getting such large sums.

Growers indicated that they would not approve the marketing programs of orders and quotas as a means to receiving support. Farmers favoring the order in previous referendums would still vote for it. Those opposed to government programs were consistent in their attitudes of opposition regarding the various federal plans.

While the farmers were opposed to assistance from the government, they did approve the suggestion of a tax of one cent per hundredweight to be used

for promotional activities of Michigan potatoes. There are many difficulties that farmers do not recognize which indicate that an advertising program for potatoes would be impractical. Therefore, an educational program to point out the inherent characteristics of advertising agricultural commodities would be of value to the farmer.

CHAPTER 8

SUMMARY

The federal price support operations for potatoes evolved from a program designed to expand production during World War II to a problem of excess supplies following the end of the hostilities. The situation was aggravated by sharply increased acreage yields during a period when per capita consumption was steadily decreasing. In an attempt to reduce the cost of the price-supporting obligations, officials of the Department of Agriculture required for the 1947 and subsequent crops compliance with acreage allotments. In 1950, the availability of price support for potatoes produced in most commercial areas was dependent upon the use of marketing orders. As these attempts to balance supply with market requirements were proving inadequate, Congress provided that beginning in 1951 no price support was to be extended to producers unless marketing quotas were in effect for potatoes. However, legislative authority was never provided for the establishment of marketing quotas for potatoes. As growers did not have the opportunity to vote on marketing quotas, the price of potatoes has not been supported since the termination of marketing activities for the 1950 crop.

The objectives of this study were to determine farmers' action under the support programs and their attitudes toward them. As a basis for analysis, 250 farmers were selected at random from fifteen county P.M.A. lists of 1950 commercial potato producers. These growers were personally interviewed during the spring of 1952 and a mail questionnaire was sent to the same growers the early part of 1953.

At the beginning of this study, it was stated that one of its purposes was to determine the response to and participation in the price support program by the commercial potato producers in Michigan and to determine whether or not there is any association between the characteristics and practices of the growers and their participation.

Responses to the program by farmers during the war years indicate that the support program's original objective--to expand total production--was achieved. Many of the acreages and yield increases were stated by the growers to have been the direct result of the government's assurance of a definite price. A larger proportion of the growers in Michigan's specialized potato-producing area, the Upper Peninsula, responded to the program.

It was intended that the price support program would continue for two years after the end of hostilities in order to permit farmers to adjust their production to the changed conditions of demand. However, the program was continued for four years after the formal end of the war and then the objective apparently became that of supporting price rather than encouraging downward production adjustments in line with decreased requirements. Although production and marketing controls were used in an attempt to reduce the excessive costs of the program, it was apparent that they failed because of a backlog of unused productive technology. The program of guaranteed prices apparently encouraged farmers to improve their production practices and in some specialized producing areas in the United States the average yield per acre has approached the maximum yield that has been achieved as a result of experimental tests. Following the removal of price supports in 1951, most of the Michigan growers planted fewer acres.

Furthermore, they did not continue to improve their production practices at the former rate. By 1952 a larger percentage of the producers had decreased their 1950 rates of seed and fertilizer applied per acre than increased them. There was also a much poorer quality of seed planted in 1952 than in 1950.

In the last year of the program, most growers planted within their acreage allotment but only a few intentionally complied. Compliance, in most instances, was said to have been a coincidence as the allotments were greater than the need or happened to fit into rotation plans. Furthermore, compliance increased correspondingly as the distance became greater from the terminal markets. While acreage allotments had little effect on reducing total production in the former support program, they might be more effective in the future if farmers have reached the point of diminishing marginal returns in the use of improved production practices. In those areas with unused productive technology, allotments will be less effective and stricter controls may be required.

There was greater use of the program with the increase in distance from the centers of population. As the same support price applied throughout Michigan, it was relatively more favorable to the grower located the furthest distance from the terminal markets. In addition, most of the growers of Bay County, an area which is relatively close to market and in which earlier potatoes are grown, did not sell potatoes to the government as the farmers received a higher price than the support level. Another reason the growers nearer to market made less use of the program is that these men undoubtedly found outlets for the lower grade potatoes although their sale was illegal. The lower grades are higher priced relative to

the better grades in producing areas near to market than at the distant shipping points.

A larger proportion of the livestock farmers employed the use of the program than did the crop, general, or part-time farmers. Besides the fact that many of the farmers in the Upper Peninsula were livestock farmers, these men received an advantage in being able to re-buy their potatoes from the government at one cent per hundredweight for livestock feed.

Very few of the producers with less than a 200-bushel yield per acre in 1950 made use of the program. Perhaps this was further indication that the individual was not an efficient manager. Furthermore, the yields in the Bay County area were relatively lower than those in the other parts of the state but the price of these early potatoes was above the support price.

Many Michigan growers did not participate in the 1950 and 1951 marketing order referendums. Although in 1950 a large majority of the producers in the Upper Peninsula voted for the order, the required majority of the growers in the state did not approve. However, the marketing of potatoes in this state was placed under an order in 1950 as the growers in the other states must have provided the required majority of a two-thirds affirmative vote. The greater approval of the order by the growers further from market is explained by two facts: first, the operation of the order was a requirement for support and the support price had greater effect on the farm price received by the producers further from the terminal markets; secondly, the regulations of the marketing order which limited shipments of the lower grades had less effect on growers who shipped potatoes relatively great distances to market. There was a plurality of those selling

their entire 1950 crop to the government who voted in favor of the order. However, the majority of farmers producing over 20 acres of potatoes in 1950 voted in opposition to the order in both referendums. Undoubtedly, many of these growers shipped their own potatoes and, as handlers, were more affected by the order's regulations than others.

It was also the purpose of this study to determine and to analyze the attitudes of the commercial potato producers toward the federal programs--price support, marketing orders, and marketing programs--relating to this industry and to determine whether or not there was any association between the characteristics and practices of the grower and his attitudes. The potato growers seemingly were aware of the relationships between the programs that were discussed with them. There was a tendency for the growers to be in favor of all or none of the federal programs but the majority was opposed to them. Their attitudes were strongly influenced by whether they personally gained as a result of the programs, and location of the growers was the principal factor involved in the personal gain. As the distance from the terminal market increased, the growers indicated a greater approval of the program. This is because the support price had a greater effect on the price received by farmers in areas further from market. Furthermore, the marketing order program, which was tied to the support feature and which made the sale of lower grades illegal, had less effect on these producers. This was because transportation costs are practically the same for all grades of potatoes and thus the higher grades have a higher price relative to the lower grades in the distant production areas.

Price was the principal point of the support program given by both those who decided the program was good and those who felt it was bad. The

former group placed a heavy premium on a plan of forward prices since there was no risk or gamble regarding price for the next season's crop. Those in opposition reasoned that the program lowered the price as it encouraged overproduction. Although the general public considered that the program raised the price of potatoes, the producers held the opposite opinion. A large majority of those with 20 acres or more believed the farm price to have been lowered, which explains their opposition to the operation to the program. Furthermore, the production and marketing restrictions probably had greater effect on these men than those producing fewer acres.

Although the growers were opposed to the program as it lowered price, the large majority of growers desired an established price announced at planting time rather than to take a chance regarding it. It was evident, therefore, that under the price conditions existing in 1950, the disadvantages of the price support program were greater than its advantages. However, it is very likely that if prices of potatoes fell to a low level in the free market that growers would change their opinion regarding price support.

The principal thing that growers did not like about the program was the administrative aspect. Farmers evidently were not too concerned with the cost or the dumping of the potatoes as these factors had relatively little effect on them. Again it is very possible that, under depressed economic conditions, producers would overlook the administrative weaknesses in order to obtain an assured price.

The acreage allotments were considered to be fair but they did not work. Most growers felt that their neighbors co-operated with the features

of the support program. However, the non-cooperators attempted to justify their own actions when they were of the opinion that their neighbors also refused to co-operate. In addition, a large percentage of those that did not make use of the program felt that quite a few of their neighbors likewise failed to do so.

The large majority of the producers stated that the program influenced large and small growers differently. It was inferred that the producer of larger acreages was able to produce potatoes more cheaply because of the economies of scale. Furthermore, as he had capital, the grower with the larger operation was considered to be in a better position to improve his production practices so as to obtain more advantages from the program.

Growers were opposed to the operation of the 1950 marketing order but there was less opposition to it than to the support program. Approval of the program was greater among the men located further from the terminal markets. The main reason given for favoring the order was that inferior or low grade potatoes should be kept off the market. The opponents were against the governmental interference and red tape. A larger number of growers favored the principle of marketing orders than was in agreement with its operation. If the producers were properly informed as to the purpose and structure of orders, there might be more support for them.

A marketing order should not be recommended for the Michigan potato industry for two principal reasons: the lower grade of potatoes will be higher priced relative to the better grades near the centers of population than in distant areas and at times perhaps that farmer near to market may receive a higher price for the lower grade than the distant farmer does for his better grade; secondly, while the order would have less effect on the

grower further from market, its effectiveness is limited unless the entire producing area is under an order. However, if an order is suggested for Michigan, every effort should be made to limit its operation to the Upper Peninsula.

A majority of the men knew nothing of marketing quotas and the growers in the Upper Peninsula had less understanding than those in the other areas. Perhaps this is because the major farm organizations are not organized in this area. The proponents of marketing quotas stated that they were satisfactory as long as their adoption was approved by growers in a democratic process. The opponents replied that the individual should have the right to run his own business and sell all the potatoes that he produced.

It was apparent that some farmers had a limited conception of the programs that were regulating the production and marketing of their commodity. If programs of marketing orders and marketing quotas are revised and presented to the farmers in a referendum, a broad program to inform producers of the merits and demerits of such plans will be useful and helpful.

In addition to being opposed to the past price support program, the majority of the farmers did not desire such a program for the 1953 crop. However, those favoring a program desired a support level of 90 per cent of parity or above. There was no association between the desire for a support program and the price that the farmer expected to receive for his potatoes. The producers further from the terminal markets were still the most interested in a price guarantee. Growers thought any program of support should be accompanied by controls and they favored those--acreage allotments--that would have the least effect on them. A majority of the farmers also favored the direct payment method of support and a limitation on the quantity

of potatoes on which an individual grower could receive support. Growers stated that they would not approve the marketing programs of orders and quotas as a means of receiving support.

While farmers were opposed to federal aid, they did approve the suggestion of promotional programs to be financed by a tax of one cent per hundredweight. Although farmers should be encouraged to handle their own problems of production and marketing rather than to rely on governmental assistance, they must be informed properly regarding the limitations that surround an advertising campaign for an agricultural commodity (such as potatoes) for which the demand is inelastic. Farmers undoubtedly are unaware of these reservations.

Although, in 1952, farmers favored programs financed by themselves and were opposed to federal price supports, it is very possible that when the farm price of potatoes drops to a low level, many growers will have different attitudes. The approval and demand for these programs of price assistance increases in proportion to the increase in distance from market because the support price will have greater effect in the outlying territory. Furthermore, marketing regulations which might be a condition of supports and which limit the sale of lower grades will have less effect as the distance from market is increased. In the distant areas where the support price has the greatest influence on price and the effect of the marketing regulations are reduced, farmers are actually relinquishing less freedom in order to receive the certainty of a higher price than the growers close to market who give up more liberties and who receive less price security.

In general, it appears that attitudes and opinions of farmers seem to have been primarily a result of their own self-interest. If they benefited from a program, they accepted it; if the controls or costs were a burden, they rejected a program. This, of course, is not unusual. However, it is possible that the reasoning of the potato farmers might have been due to misguided self-interest. Rejection or acceptance of the programs may have been the result of a lack of real knowledge. Therefore, there is occasion for an educational program so that farmers may be in a better position to evaluate the results of federal price support programs.

APPENDIX A

SELECTION OF THE SAMPLE

and

THE TIMING OF INTERVIEWS

Selection of the Sample

The selection of the sample was based on the number of potato farms as determined from information supplied by the state office of the P.M.A. (Appendix Table 1). Information about the number of acres allotted and the number of eligible farms was also obtained. In order to be classified as an eligible farm, the potato acreage on the farm must have been equal to or below the allotted acreage for the farm and an eligibility fee depending on the number of allotted acres must have been paid to the county P.M.A. office. The eligibility fee varied in each county.

The state was divided into four marketing areas. When the farm price received per bushel for potatoes in 1940 was plotted on a map of Michigan, these four distinct areas resulted. With the exception of Roscommon County, the boundaries of the marketing areas also corresponded to the boundaries of the Crop Reporting Districts in Michigan as developed by the Crop Reporting Service. Marketing Area No. One was the same as Crop Reporting District No. One; Marketing Area No. Two contained Districts Two, Three, and Four; Marketing Area No. Three included Districts Five, Six, and Seven; and Marketing Area Four covered Districts Eight and Nine.

The 250 sample was divided among the marketing areas in proportion to the number of potato farms in the area to the total number of potato farms in Michigan in 1950 (Appendix Table 2).

APPENDIX TABLE 1

Number of Potato Farms, Number of Allotted Acres, and Number of Eligible Farms, by Counties, Michigan, 1950

County	Number of Farms	No. of Allotted Acres	No. of Eligible Farms	County	Number of Farms	No. of Allotted Acres	No. of Eligible Farms
Alger	42	315.5	13	Clare	20	103.5	7
Baraga	6	35.0	1	Gladwin	5	21.0	0
Chippewa	23	135.0	0	Gratiot	3	16.0	0
Delta	130	1152.0	63	Isabella	33	362.5	31
Dickinson	45	335.0	25	Mecosta	178	1382.0	61
Gogebic	19	151.0	7	Midland	20	222.0	0
Houghton	237	2914.0	170	Montcalm	831	8026.0	286
Iron	35	632.5	21	Osceola	207	1129.5	97
Luce	43	534.0	14		1297	11262.5	482
Mackinac	15	60.0	1				
Marquette	105	1180.5	105	Arenac	14	268.0	10
Menominee	77	419.0	26	Bay	427	7232.0	29
Ontonagon	9	72.0	8	Huron	18	141.0	0
Schoolcraft	74	776.0	46	Saginaw	33	392.5	2
	860	8711.5	500	Sanilac	6	63.0	0
				Tuscola	47	445.0	0
Antrim	155	2253.5	92		545	8541.5	41
Benzie	18	115.0	17				
Charlevoix	62	510.5	36	Allegan	33	484.5	14
Emmet	150	1374.0	106	Berrien	33	174.5	0
Grand Traverse	154	1112.5	95	Cass	53	402.5	0
Kalkaska	79	794.5	40	Kalamazoo	14	308.0	0
Leelanau	285	1725.0	166	Kent	99	943.5	14
Manistee	51	376.0	31	Ottawa	18	155.0	0
Missaukee	165	1073.2	88	Van Buren	40	343.5	0
Wexford	85	418.7	28		290	2811.5	28
	1204	9752.9	699				
				Barry	10	188.5	3
Alcona	7	32.5	0	Branch	10	117.0	1
Alpena	225	1398.0	109	Calhoun	27	266.0	12
Cheboygan	61	328.0	28	Clinton	10	119.0	4
Crawford	5	47.5	1	Eaton	9	174.0	0
Iosco	29	193.0	4	Hillsdale	18	141.0	1
Montmorency	20	166.5	9	Ingham	38	397.5	2
Ogemaw	7	68.4	0	Ionia	21	236.5	4
Oscoda	3	24.0	0	Jackson	54	1113.0	9
Otsego	234	2048.0	141	St. Joseph	7	55.5	2
Presque Isle	406	4081.0	130	Shiawassee	14	169.0	0
Roscommon	--	--	--		218	2977.0	38
	997	8386.9	422				

APPENDIX TABLE 1 (cont.)

County	Number of Farms	No. of Allotted Acres	No. of Eligible Farms	County	Number of Farms	No. of Allotted Acres	No. of Eligible Farms
				Genesee	23	105.0	0
Lake	10	60.5	2	Lapeer	32	373.0	0
Mason	27	144.5	8	Lenawee	42	965.0	5
Muskegon	11	58.0	0	Livingston	32	374.0	1
Newaygo	36	299.5	4	Macomb	48	490.5	0
Oceana	106	730.5	29	Monroe	75	941.0	0
	190	1293.0	43	Oakland	75	825.5	16
				St. Clair	10	110.0	0
				Washtenaw	29	788.8	1
				Wayne	22	139.5	0
					388	5112.3	23
				Total	5989	58,849.1	2,276

Source: Michigan Office, Production and Marketing Administration, Lansing, Michigan.

APPENDIX TABLE 2

Number of Commercial Potato Growers and Allocation of Farms to Visit, by Marketing Areas and Crop Reporting Districts, Michigan, 1950

Marketing Area	Crop Reporting District	Number of Farms[1]	Per cent of total	Number of Records	Percent of Total
One	One	860	14.4	36	14.4
Two	Two, Three, Four	2,391	39.9	101	40.4
Three	Five, Six, Seven	2,132	35.6	89	35.6
Four	Eight, Nine	606	10.1	24	9.6
		5,989	100.0	250	100.0

[1] Michigan Office, Production and Marketing Administration, Lansing, Mich.

It was necessary to establish two sampling units, each containing 125 farms. One of these groups was used by the University of Minnesota to represent the Michigan industry. The two groups combined to make the total 250 schedules used in this study.

The number of records to be obtained in each marketing area was apportioned among the fifteen counties (Table 11, page 52).

The total number of farms with three acres of potatoes or more in 1950 was determined in each county. The county list was then broken down into three groups of equal size by potato acreage; e.g., 33 growers with 9 acres or fewer, 33 growers with between 10 and 19 acres, 33 growers with 20 acres or more. A random sample was then drawn from each group.

One member of the office personnel was then asked to select a number between one and the interval determined by dividing the total number of

commercial potato farmers by the number of records desired. Every name corresponding to the number, on the three lists of names was drawn, beginning with the number assigned by the office worker. With another number chosen at random by the secretary the alternates were selected in a similar fashion.

For example, suppose in County A there were 99 potato farmers in 1950 raising three acres or more and there were 12 schedules to be obtained. There would be 33 farms in the low one-third, 33 farms in the high one-third, and 33 farms in the middle one-third. The total number of farmers (99) divided by the schedules (12) to be obtained in the county gives the interval number (8). The secretary would be asked to select a number between one and eight. She might have selected the number eight. Therefore, the 8th, 16th, 24th, and 32nd name in each of the three strata were on the original list.

Each name selected for the original list was given a number; e.g., L1 (indicating from the large group), M2 (middle group), or S4 (small group). Alternates were given the same number but underscored; e.g., L1, M2, or S4. Each grower was assigned an alternate who lived nearby, so that the enumerator could proceed directly to the alternate if the original were not at home.

The location of the farmers on both the original and the alternate list was designated by their assigned numbers on county road maps supplied by the Road Commission of the county. The aid of the county agricultural agent or the chairman of the P.M.A. was valuable in determining the location of the farmers selected in the sample.

At the completion of the first 125 interviews Dr. William D. Baten, Statistician for the Michigan Agricultural Experiment Station, was consulted concerning the minimum number of interviews that should be taken to assure reliability of the results. As a basis for this determination, the 1951 yields given by farmers in the first 125 interviews were used. Dr. Baten compared the standard deviation of the means to the means for the 1951 yield observations given for certified seed, seed one-year from certification, seed more than one-year from certification, and the total. It was felt that 250 schedules would provide yield information so that the standard deviation of the mean would be within five per cent of the mean for each of the four categories.

Upon completion of the 250 interviews the comparison of standard deviation of the mean with each of the means was as follows: certified seed, standard deviation of the mean was 4.0 per cent of the mean; seed one-year from certification, 4.7 per cent; seed more than one-year from certification, 5.5 per cent; and the total, 2.8 per cent. Dr. Baten indicated that the number of interviews would be sufficient.

Time of Interviews

The 1951 potato crop in the United States was 24 per cent smaller than the large crop of 430 million bushels in 1950. As a result, the price of potatoes began to rise at harvest and between November 15 and December 15, 1951, the United States potato price jumped from 95 to 105 per cent of parity. When potatoes reached the parity level, they had attained their legal minimum ceiling level according to the Defense Production Act of 1951.

The Director of the Office of Price Stabilization on January 19, 1952, issued Ceiling Price Regulation 113, which placed potato prices under ceilings. The ceiling order remained in effect until June 6, 1952.

The 250 personal interviews were made in the spring of 1952 according to the following schedule:

March 24-30	91 interviews
April 1-15	21
April 16-30	50
May 1-15	16
May 15-30	0
June 1-15	48
June 16-20	24
	250 interviews

APPENDIX B

CHARACTERISTICS OF THE FARMERS INCLUDED IN THE SURVEY

Characteristics of the Farmers Interviewed

All of the 250 farmers raised three acres or more of potatoes in 1950. However, 16 growers did not raise potatoes in 1951 and 19 did not produce potatoes in 1952. Approximately one-third of the producers had grown potatoes from 20 to 29 years previously. One-quarter had raised potatoes 10 to 19 years (Appendix Table 3).

APPENDIX TABLE 3

Number of Years Farmers in Survey Had Grown Potatoes,

By Number and Per Cent

Years	Number	Per Cent
0 to 9	35	14.0
10 to 19	61	24.4
20 to 29	80	32.0
30 to 39	37	14.8
40 and over	37	14.8
	250	100.0

More than one-half of these farmers were between the ages of 40 and 59. The remaining men were about evenly distributed between younger and older years (Appendix Table 4).

The farmers in the survey had larger farms than those Michigan farmers (155,589) reporting in the 1950 census. Fewer than one out of ten of the farmers interviewed had fewer than 50 acres and about three of ten census farmers had fewer than 50 acres (Appendix Table 5). This difference arises from interviewing only those farmers who planted three acres or more potatoes in 1950.

APPENDIX TABLE 4

Age of Farmers in Survey, by Number and Per Cent

Years	Number	Per Cent
20 - 29	16	6.4
30 - 39	42	16.8
40 - 49	72	28.8
50 - 59	68	27.2
60 - 69	41	16.4
70 and over	11	4.4
	250	100.0

APPENDIX TABLE 5

Acres in Farms in Survey and 1950 Census

by Numbers and Per Cent, Michigan

Acres	Survey Farms		Census Farms	
	Number	Per Cent	Number*	Per Cent
Less than 50	20	8.0	44,701	28.7
50 to 99	69	27.6	42,917	27.6
100 to 139	71	28.4	24,686	15.9
140 to 179	29	11.6	17,580	11.3
180 to 219	19	7.6	9,557	6.1
220 to 259	11	4.4	5,954	3.8
260 to 499	24	9.6	8,822	5.7
500 and over	7	2.8	1,372	.9
Total	250	100.0	155,589	100.0

* 1950 Census of Agriculture

Almost one-half of the farmers produced three to nine acres of potatoes in 1950. Slightly fewer than one-fourth of the producers planted 20 acres or more of potatoes (Appendix Table 6).

APPENDIX TABLE 6

Acres of Potatoes Planted by Producers in Survey, by Number and Per Cent

Acres	Number	Per Cent
3 to 9	117	46.8
10 to 19	77	30.8
20 to 29	17	6.8
30 to 39	12	4.8
40 to 49	12	4.8
50 and over	15	6.0
Total	250	100.0

The 250 farmers included in the survey were divided into types--crop, livestock, general and part-time--according to the amount of labor put in by the farmer on his farm and off his farm. Each farmer was asked the number of acres in each crop, the number of livestock and poultry, and the number of days worked off the farm. From this information the total number of productive man-work units for each farmer was determined.[1]

If 60 per cent or more productive man-work units or more came from the production of crops, vegetables, fruit, or potatoes, the producer was

[1] A productive man-work unit represents the amount of productive work done by a man working at average labor efficiency in a ten-hour day. The factors used were taken from Elton B. Hill and Lauren H. Brown, Principles of Farm Management, Ann Arbor, Mich., Edward Bros., Inc., 1947, pp. 37.

designated as a crop farmer. If 60 per cent or more productive man-work units came from the raising of livestock and poultry, he was a livestock farmer. If 60 per cent or more of the units came from work off the farm, the man was a part-time farmer. All other farmers were defined as general farmers. With this classification of farmers, there was approximately equal distribution among the 250 farmers of crop, livestock, and general farmers with only a few part-time farmers (Appendix Table 7).

APPENDIX TABLE 7

Classification of the 250 Farmers Interviewed,

by Number and Per Cent

Type of Farmer	Number	Per Cent
Crop	74	29.6
Livestock	77	30.8
General	86	34.4
Part-time	13	5.2
Total	250	100.0

Each farmer was given a production rating which was based on various production practices and yield. The factors considered were the following: degree of seed certification in each of the years 1950, 1951 and 1952; seed rate per acre used or to be used in 1952; quantity of fertilizer applied or to be applied per acre in 1952; amount of manure spread or to be spread per acre in 1952; number of sprays to be applied in 1952; yield per acre in 1950; and yield per acre in 1951.

The results of the arbitrary selection of factors are given in Appendix Table 8.

APPENDIX TABLE 8

Ratings of Growers Based on Production Practices and Yield

Rating	Number*	Per Cent
Very excellent	20	8.8
Excellent	52	22.9
Good	42	18.5
Fair	68	30.0
Poor	45	19.8
Total	227	100.0

* 23 growers in the survey did not raise potatoes in 1951 or 1952.

APPENDIX C

INSTRUCTIONS TO ENUMERATORS

Instructions To Enumerator
(Minnesota Questionnaire)

Important:

The enumerator who fills out this questionnaire is the most important determinant of the success or failure of the questionnaire in eliciting desired information. It is of the utmost importance that he recognize the high degree of skill involved in competent enumeration and that he follow instructions to the letter.

General Instructions and Suggestions:

The first prerequisite to the successful prosecution of this survey is that the enumerator shall have an understanding of the purposes of this questionnaire. To gain such understanding there is no substitute for a careful reading and re-reading of the questionnaire. It is also helpful to understand the background study which has gone into the questionnaire. This questionnaire, it is important to keep in mind, is not a "fishing expedition"; it is instead a carefully planned means of testing certain well-defined hypotheses. Approximately eighteen months of concentrated research have gone into the framing of a few major hypotheses regarding the impact of the price support program on the potato industry. These hypotheses have been subjected to various statistical testing procedures, as well as to the continuing scrutiny of outstanding horticulturists and agricultural economists, several of whom have had years of first hand experience dealing with and studying potato production. No less than a dozen of these people have participated directly in the formulation of the questions. After the questionnaire had been through several revisions, a preliminary draft was tested in Clay County, Minnesota. The experience gained in this pre-test, together with numerous suggestions received in a week's consultation with trained and experienced personnel in the B.A.E.'s Division of Special Surveys, formed the basis for still further revisions which are embodied in the final questionnaire. Most or all of this work will have been wasted if the enumeration is slipshod. There simply is no substitute for enumeration which is conscientious, understanding, and respectful of both the questionnaire and the respondent. The professor or research worker who hires

the enumerator is ready at any time to discuss this questionnaire and its prosecution with the enumerator.

Specific Instructions:

1. The first and most delicate task which confronts the enumerator when he takes the questionnaire into the field is to establish the proper rapport with the farmer-respondent. The farmer is under no obligation to cooperate, therefore he must be given every encouragement to do so. In general, he is interested, intelligent, and cooperative--which means that it can be a real pleasure to both him and the enumerator to go through the questionnaire. The enumerator may wish to make it clear at the outset that he is a university employee, engaged in collecting information to add to the general understanding of a price support program which is now history, obligated only to himself and to the search for understanding. He should also stress the fact that all replies are held in strictest confidence.

2. The questions are to be asked exactly as stated with no voluntary elaborations or alterations. If each enumerator were to state the questions in accordance with his own interpretation the results would be meaningless. If the respondent indicates failure to understand the question, the enumerator, in explaining it, should keep as close as possible to the original statement of the question and by all means keep to the original meaning. Every effort has been made to keep the questions conversational and folksy in tone, so that the skilled enumerator need not sound awkward or unnatural in reading them verbatim.

3. The enumerator should proceed to and through the questionnaire as rapidly as discretion permits; otherwise the respondent may reach a "fatigue point" before the interview is concluded and give careless or unreliable replies.

4. The entries which the enumerator makes on the questionnaire are the only record of the interview. These entries should be as complete and concise as possible, recognizing the unlikelihood, and even the undesirability, of taking down every word that the respondent utters. Suppose, for example, that in response to question 24, "Do you think the price support program was a good or bad thing for you" the farmer says, "Oh well, Hell, that's pretty hard to say. Of course, it's

nice to be sure you can get rid of your crop for a fair price. All these surpluses and everything got some pretty bad publicity, and I'm not so sure they didn't deserve it. It's good for me all right, to get a fair price and to know I'm gonna get it—but the lady that buys the potatoes in town doesn't like it when prices are high, and the taxpayer don't like it either when he sees how much it costs him—of course, I pay my taxes too and I've got to think about that. Seems like there ought to be some way to get us a fair price for the stuff we grow without getting these big surpluses and all this bad publicity. Naturally I like to be paid for my time and my costs, and that part of it I know was good for me and I won't say it wasn't." The essence of this answer is that the respondent considers that the program was a good thing for him. Most of this answer is superfluous, it is true, but this need not always be the case. Oftentimes, in answering a general question such as this one, the respondent will divulge the answers to questions which occur elsewhere on the schedule. The enumerator should be alert to catch these answers and should be familiar enough with his questionnaire to recognize answers to other questions. The farmer might have replied to this same question, for example, "Sure, I think it was a good thing because I knew what I was gonna get for my spuds when I put 'em in the ground and I knew I wouldn't lose money on 'em. I don't think my allotment was fair, but I aint kickin' too much on that 'cause I could grow other stuff just as easy and even make more money on beans than on my spuds." There is very little that is superfluous in this answer. There are four questions in the schedule which have been touched upon in this statement, and the alert enumerator will make an entry for each of the four, thereby saving time and avoiding later confusion. Questions 22 and 28, as well as questions 24 and 25, have been answered in this statement. Since question 22 has already been covered, the enumerator would presumably make entries for the other three questions in the light of this statement.

5. Provision is made in the schedule for answers which say in effect "I don't know". The interview should be conducted in such a manner, however, that the respondent is encouraged to give useful answers. If the question involves an

estimate or a hypothetical situation (e.g., what would you have done if...?) it is important to encourage responses by saying "Well, what's your best guess?" or "Well, what do you think you might have done?" etc. rather than dropping the question at the first hint that the respondent is disinclined to answer. No entry is required where for any reason the answer is not ascertained. If the respondent refuses to answer, gives only an evasive answer, etc., the question may be left blank and will be coded "not ascertained".

6. Some of the so-called "open" questions in the schedule are followed by specific "probes". The enumerator will soon become accustomed to the fact that the "probes" are necessary in some cases and unnecessary in others. The more voluble or cooperative respondents will refer to the practices mentioned in the "probes" following question 44. Others may simply reply "yes" or "no" to question 44, making it necessary for the enumerator to read the "probes" as reminders of what practices we have in mind.

7. Questions 58 thru 72 involve the necessity that the enumerator make certain computations and have certain information before the questions can be read accurately and smoothly. It is espcially important for the enumerator to familiarize himself closely with this series of questions and develop great facility in reading them; otherwise the usefulness of the questions is vitiated. Question 58 is designed to elicit a response which will be used in later questions, thus it is important to obtain this response and to keep it in mind. If the respondent is the least bit reluctant to hazard a price estimate, he should be handed the card listing various prices and asked to check the one which he thinks most likely. As soon as the enumerator obtains this estimate he should make some quick mental calculations, as follows:

a. If no single price is stated, but a range of prices, e.g., "between a dollar and a half and two dollars" the enumerator should fix in his mind the single price at the middle of the range; i.e., $1.75 in this illustration.

b. The enumerator should then calculate (with pencil if necessary) prices

50% higher and lower than this price, and prices 25% higher and lower than this price. In this case $2.63 (use 2.65) and $.88 (use .90) are 50% higher and lower. Likewise, 2.20 and 1.30 would be used as 25% higher and lower. These prices should be entered in the appropriate blanks in succeeding questions immediately, so that the questions will flow smoothly when they are read. In terms of this illustration the following entries would be made:

Question	Price Entry
59	1.75
61	(a) 2.65
	(b) .90
	(c) 1.75
62	(a) 2.20
	(b) 1.30
	(c) 1.75
64	1.75
69	1.75
71	1.75

The blanks in questions 65, 70, and 72 should be filled out prior to the interview. These are prices at 90% of parity and will be computed for each area in advance of the survey. These questions are to be asked only if this price is higher than the expected price which the respondent provides. It should be noted that the price estimate obtained in reply to question 61 is employed in six later questions and that therefore it is important to approach this question diplomatically so as to elicit a usable response.

8. Questions 7, 8, 13, 14, 15, 17, 18, 19, 36, 37, 51, 52, 54, 60 are contingent questions. That is to say, each is contingent upon the answer to some previous question or upon information elicited by some previous question. If, for example, the answer to question 6 is "No", then questions 7 and 8 are not applicable, since they are contingent upon a "Yes" answer to question 6. In order to facilitate the

later coding of the completed questionnaire, the enumerator should enter "N.A." for not applicable wherever the contingent question does not require an answer.

INSTRUCTIONS TO THE ENUMERATOR ON POTATO SURVEY
(Michigan State Questionnaire)

Important:

Enumeration is the secret to the success of any survey. It is important that you use care in asking the questions and completing the schedule. No questions should be overlooked and all answers must be readable. Remember some other person must read your writing and thus it must be legible after it becomes "cold".

Furthermore you are a public relations representative of Michigan State College. The potato producer will quite often judge the quality of the Department of Agricultural Economics and the Agricultural College at Michigan State by his contact with you.

Each question must indicate that you have not overlooked asking it. So for those spaces that do not require an answer draw a line to indicate that it was not asked because of previous answers.

Many of the instructions for the Minnesota questionnaire also apply to the Michigan supplement of questions.

Specific Instructions

Q. 1. Your first question regarding this table should be, "Now you stated previously that you were going to plant _____ acres this spring (Minn. Question 63). Are you going to use certified or non-certified seed?" If non-certified seed is to be used, determine the years from certification. If he is planting seed more than one year from certification, find out how many years from certification that the seed is. Indicate this in the heading above the lower table. If there is more than one answer, place the corresponding year (1952, 1951, or 1950) after the number of years.

Some farmers will be producing potatoes for certification. Ask the farmer if he produces certified seed and how many acres that he plans to have certified by the state inspectors this year, or has had certified in the other years (1950 and 1951). Indicate the acres raised for certification by circling the acreage.

It is possible that in the same year a farmer might use both certified seed and seed one year from certification or other combinations. Thus you would have information for the same year in two different rows.

Determine the acres of each variety. He might plant more than one variety each year. Some of the important Michigan varieties are: Katahdin, Sebago, Chippewa, Menominee, Green Mountain, Russet Rural, Pontiac, and Irish Cobbler.

Under the column headed "Seed, bu/a, c-w-m" indicate the bushels of seed planted per acre. Be certain that the farmer gives his answer in bushels and not bags or cwt. This answer will vary from 15 to 35 bu. Further ask whether this seed is planted whole or as cut seed. He might say that he cuts some of the larger potatoes in his seed and the rest is whole. Therefore, place a "M" after the seed rate which will indicate that the seed is partly cut and partly whole. Many farmers will plant a size B seed which is usually planted whole. Thus place a W after the seed rate. If all the seed is cut, place a C after the information.

Ask whether the seed was grown by him (own) or purchased. Usually certified seed will be purchased and seed removed from certification will be his own. A common practice in Michigan is to buy certified seed one year, and the next year to plant seed one year from certification. During the latter year the seed would be his own and would be indicated by the word "own" in this column.

Determine for each year if the farmer irrigated his potato acreage and if so how many acres. He might not have irrigated last year but still had the equipment as last year was a little wet in some areas. Thus ask the same question for the other years.

Ask the amount of fertilizer applied per acre. Place this figure on top of the square. This amount will probably vary from 500 lbs. to 2,000 lbs. per acre. The analysis should be placed under this figure. The analysis will vary as will the rate from year to year. Common analyses are 3-12-12, 4-16-8,

3-9-18, 0-8-24 and 0-9-27.

Some farmers will put manure on the potato land the winter and spring previous to planting. Determine this practice and the number of loads per acre.

The yield per acre is a very important figure. Obtain this figure in bushels for each acreage figure shown. Be certain that this information is in bushels and not bags or cwt.

The history of the use of the potato land is the part of the survey that interests the Field Crops Department. They would like to know what was on the 1952 potato land in 1951 etc. From this information we will know something of the rotation practices followed by this farmer. Determine disposition of the crop if this crop was hay, alfalfa, soybeans, or something that might have been left in the field. For example some producers will have alfalfa on this land the previous year, and not removed the crop but only cut it down. Others will cut one crop of alfalfa and leave the remainder. You will find a variety of answers and your answer must give a picture of this farmer's practices. The farmer has probably used fertilizer on this crop the previous year. Determine this rate and analysis. If manure was also used determine the loads per acre.

Many of the growers will plant a cover crop such as rye. In this column indicate if a cover crop was used and the type.

Q. 2 - This question should only be asked if certified seed was used last year (1951). Some logical answers will be Prince Edward Island, New Brunswick, Wisconsin, North Dakota (Red River Valley), Minnesota, and Michigan but don't suggest these.

Q. 3 - The key word of this question is <u>principally</u>.

Check the type that applies.

Q. 4 - There may be some question as to what value, but use the statement following the question. We are not interested in the tractor and general use equipment.

The term "storage building" applies to those structures that are used primarily for storing potatoes. Some farmers will have a specially constructed building or a remodeled barn for storing potatoes.

Q.5 - Check proper answer.

Q.6 - If the producer has given an indication that it will be larger or smaller, determine the percent. A range in percentage will be acceptable. If producer doesn't offer an answer, ask if it will increase greatly or little, then give a ridiculous range such as 50%.

Q.7 - Some logical answers to this question would be March or April; this spring; a year previous; last fall at time of harvesting; or it is a part of my rotation and not changed.

Q.8 - Answers might be that if he considers the price trends of other possible crops as well as potatoes; the possibility of not obtaining the required labor to harvest the crop; the inability to obtain seed or fertilizer; the potato crop is a definite part of my rotation and the acreage cannot be changed quickly from year to year. If he says because he thinks this is a good year for potatoes, ask what he means by this or why he thinks this.

Q.9 - Probe to discover other factors.

Q.10 - If the answers to 8a and 9 indicate that the farmer should or must use some source of information in his decision or that his decision is based on something other than farm considerations, determine these sources. Possible sources might be Farmers' Week, papers, radio, and farm magazines.

Q.11 - Even though a producer might not use this figure in his planning, go ahead and get his estimate of the cost of raising an acre of potatoes. Ask the farmer whether this figure includes harvesting or not? Specify if it includes digging. No qualification following the answer indicates that you have asked the farmer and he did not include digging in his estimate.

Q.12 - This includes all out-of-pocket cash costsestimated by the farmer. The answer to this question should be lower than the answer to Q.11

Q.13- If the farmer indicates that he doesn't figure a cost for seed or power and equipment, indicate a zero in the proper space but ask him the reason for this. Place this information below the term. For example, the farmer might feel that because his seed is taken from the culls and there should be no expense charged for this. Indicate this reason before the question. By cost for spray and dust we are interested only in the material cost.

Q.14-If the farmer indicates that he doesn't figure what yields he expects to receive, write DF after bu. However, determine an answer from him by asking him the question again and asking him to take an estimate on his yield.

Q.15-Each year in the fall for the past ten years the U. S. Department of Agriculture has released their recommendation as to the number of acres that should be planted to potatoes. This information is to assist the farmers in making his plans.

Q.16-On March 19, 1952, the Crop Reporting Service released this figure. It indicates that Michigan growers intend to plant 10 percent fewer acres than last year.

Q.17-The instructions follow the question. Check the proper answer.

Q.18-DO NOT CHECK EACH THAT APPLIES but only the principal one that applies.

Q.19-This charge doesn't include the hauling charges to the storage but simply what the grower pays for picking up his potatoes. There might be a farmer that might not have such charges as his potatoes may be elevated to wagons rather than picked up from the ground.

Q.20-Most growers will start digging their potatoes in late September or early October so you might start with September. In Bay County potatoes are dug in July and August. Ask what percent of this total crop is saved for seed and place this percentage at the end of the answers(May (%) Seed ( )). The total percent for each month plus the percentage saved for seed should add to 100%. If he still haspotatoes when you call on him, have him estimate whether he will sell them in April or May.

Q.21-Only ask the storage question if the producer sold potatoes after November. Determine where these potatoes were stored. Some growers will store these potatoes in the basement of the house. Some will store them on the barn floor or in some area near the cows. Enter this figure in the space after "barn". Several growers have remodeled their barns into potato storages. If this is the case, insert the quantity in this space. Some of the larger growers will have their own specialized storage built especially for potatoes. Therefore enter the bushels following this term. Other possibilities are the granary, machine-shed, pit, etc.

A farmer may rent his storage space. This might be a coop storage. In this case, place the quantity after the term "commercial storage".

Q.22-Logical answers might be that because of the labor demanded for harvesting, the potatoes were stored until more labor was available; no place to store; desire to sell crop so as to travel in winter; and the expectation of receiving higher price. If the latter statement is used, ask why he thought the price would be higher.

Q.23-Probe into other factors.

Q.24-If his answers to 22 and 23 indicate that reasons were other than due to farm operation and that information would come from an outside source, discover the type of the source. Such answers as newspapers, radio, county agent, or neighbors would be reasonable.

Q.25-In this question you are to determine what portion of his crop was sold on an ungraded basis. Sometimes the potatoes are sold just as they are dug and the buyer will grade.

Q.26-Regardless of whether the potatoes were sold on a graded or field-run basis, discover what the grade of the potatoes would have been when they were dug or placed in storage. If a farmer states a certain percentage were U.S Commercial, write U.S. Commercial under "culls" and determine the percentage.

Q.27-Many potatoes in storage last season rotted because of blight, so determine the loss in storage due to this factor.

Q.28-The instructions for this question follow it. Be sure and obtain the disposition of each type of "pickout". For example, many farmers will keep small size potatoes for seed or sell for seed. Some of the culls will be fed to livestock.

Q.29-It is important in this question to indicate whether the farmer sold U.S. No. 1 or U. S. Commercial. In most instances the grade sold will be U.S. No. 1. Other unofficial grades should be noted. Next determine the types of buyers he sold to. Examples of types of buyers are chain stores, potato chip companies, canning companies, truckers, wholesalers, neighbors, consumers (direct), hotels, etc. Ask the farmer for the name of the buyer and place the name over the type of buyer. The Department is interested in making a dealer survey at a later date and would desire these names to compile a list of dealers. However, if the farmer indicates a desire not to give these names go on with the questionnaire and forget the names. Don't lose him because of the names. It is more important to finish the schedule than to get them.

Obtain the approximate percent of the total crop sold through each type of buyer. Under the heading "where buyer took possession" indicate the place where the farmer may have delivered the potatoes. Quite often this will be at the farm. However, the farmer may have delivered the potatoes to the retail store, the chain's warehouse, the canning company's cannery, the wholesaler's stall in a terminal market, to the consumer at a farmer's market, etc.

Under the "who graded and packed" column indicate whether the farmer or buyer graded and packed. In some cases the buyer might have come on to the farm and performed this operation. In this case indicate "buyer".

In the column under "Bag sizes" indicate the percent of the total that was sold in each bag size to each type dealer. For example the farmer might have

sold 50% in 100# burlap sacks, 25% in 50# paper bags, and 25% in 15# paper bags to one dealer and all 100# to another. Determine whether the farmer or the buyer furnished the bag in each instance.

If the potatoes were sized, determine the minimum size packed for each buyer and each bag size.

Under the heading "Final Destination for Consumption" discover where these potatoes moved if it is at all possible. For example the retail store may have been in Detroit. The truckers might have taken the potatoes to New Orleans, etc. Sometimes they can only say that they think they went to West Virginia, etc. The types of buyers will be somewhat different.

Q.30-&31 The farmer might not have had potatoes in January so that the price ceiling did not affect him. If he had potatoes and hisprice was changed, indicate the amount per bushel or per cwt. Be sure and designate bu. or cwt.

Q.32-&33. By changes in marketing practices it is meant that he might have graded more or less, that he might have washed his potatoes rather than sell non-washed potatoes, that he put up a different sized pack, that he might have transported more potatoes to market in his own trucks rather than having the buyer come to the farms.

Q.34-Be sure and emphasize the words in capital letters, if the grower has no opinion, check that space.

Q.35-&36. All growers that we are to visit had acreage allotments assigned to them but perhaps the producer wasn't aware of them. Therefore, he could in good faith answer "no" or "don't know".

Q.37.By looking at the front page of the MSC Questionnaire(Question # 1) you can compare his 1950 allotment with his 1950 planted acreage. Some of the possible answers might be that the allotment wasn't large enough, that his potato acreage is determined by his rotation practice and not by the PMA officals, that he didn't have the labor in 1950 to produce the alloted acreage, and that he doesn't believe in acreage allotments.

Q.38- Only those growers that planted within their allotment would be eligible to sell to the government. Don't ask the question if the grower planted over his allotment.

Q.39- Ask this question only if potatoes were sold to the government. Since the government presumably stood ready to buy all the eligible producer's potatoes, it was possible for him to sell all his potatoes to the government. Reasons that he might give are that the price for U.S. No. 1's was better in the market so he sold only No. 2's to the government, that the County P.M.A. Office discouraged the sale of all a grower's potatoes to the government, and that the grower didn't have an adequate storage.

Q.40- Again ask this question only if potatoes were sold to the government. Some logical answers might be that the government price was better than the market price, that it was much easier to sell to the government, that his potatoes were not of good enough quality for the open-market, and that he didn't have adequate storage so had to move the potatoes in the fall. If the grower simply states that it was because he could get more money, obtain a better explanation of this statement by asking "why?".

Q.41. &42. Some of the reasons that the farmer might give for favoring the marketing order were that it kept the poorer grades off the market during the surplus year and that he felt that it brought a better price for his potatoes. Some of the reasons for opposition were that the producer should have the right to determine what grades should be marketed, that the program was one more step toward government socialism, that the farmer wants to produce a good package anyway so why have the red tape, and that the grades should be allowed to vary from year to year.

Q.43. &44. All potato producers were given the opportunity of voting on the order for both the 1950 and 1951 crops.

Q.45. If the producer should ask what these levels were, answer by stating that it was about $1.00 per bu. or $1.75 per cwt.

Q.46. &47. We are not interested in rumors but whether the grower actually knew of violations of the order. Some of the types of violations might have been failure to get inspection, selling culls or No.2's, and failure to pack above a minimum size.

Q.48. &49. Be sure and emphasize the words "each" and "grades". If he answers "don't know", there is no need to ask question # 49.

Q.50. &51. State the answer of the producer as near as possible as to how he stated it. If he has an opinion (regardless of the type), ask him question # 51.

Q.52. &53. While this question is similar to Q. 48 there is a different principle involved so that a farmer could logically answer the two questions differently.

Q.54. Some growers will be so much against support that they will not desire to answer this question so place their answer in the "against support" box.

Q.55. This tax would be a compulsory tax.

Q.56. If the farmer objects to this question indicate an estimate of his age.

Q.57. This doesn't mean the years he spent on the farm as a boy but the time that he started out on his own on a farm.

Q.58. If this farmer had started farming before 1932, ask the question. Try to determine if he lost his farm, if his farm was mortgaged or if his mortgage was scaled down. You must play this question by ear and be careful not to offend the farmer.

Q.59. Do not include 1952 in your number of years.

Q.60. Questions 60 and 62 are intended to determine the type and scope of the farm operation and how important potatoes are in the total. The potato acreage can be obtained from MSC Question # 1 or Minn. Question # 4. The total of the tillable acres should correspond roughly with his answer to Minn. Question # 2. Corn(all) includes field and silage corn. Non-tillable acres would include the woods, the land around the buildings, and non-tillable pasture.

Q.61. This refers to land that might produce an average crop of potatoes.

Q.62. For this information obtain the <u>average</u> number of head. We are <u>not</u> interested in the number of lambs but only the ewes. For hogs the figure to obtain

is not the number of hogs but the no. of litters raised in 1951.

Q. 63. Include in this figure any custom work performed on the farm such as running a mint still, hay baling, and work of any nature off the farm.

Q.64. There will be a wide variety of answers for these questions. Many will be rather lenghty so interpret the principal points made by the producer. In the question regarding "agricultural production" ask if the farmer thinks the government should encourage production, direct production, and encourage agricultural research.

Comments: The enumerator should fill this out after leaving the farm. Indicate in this space any particular points of observation that you might have made while visiting with this farmer. Does he appear to be a well educated and a very aggressive farmer? etc.

Place your initials or name at the bottom of the page.

APPENDIX D

QUESTIONNAIRES USED IN PERSONAL INTERVIEWS

Use of the Questionnaires

The questions in the Minnesota questionnaire were asked first in each of the interviews. However, for the second series of 125 interviews the Minnesota schedule was modified slightly by the elimination of Questions 5 through 8, 34, and 40 through 52. A new question was substituted for number 34. The questions were deleted because their answers would have been of no value in the Michigan State study, and it was necessary to reduce the time of the interview.

The Michigan State questionnaire was used in the 250 interviews. Questions 46 and 47 were not asked except in the first fifty interviews. Growers were hesitant in reporting on their neighbors or themselves. The response to questions 11-12-13 was very disappointing and in many cases time was not taken to arrive at the answers to these questions.

Survey of Potato Producer Attitudes and Practices

(Minnesota Questionnaire)

Name_____ Number_____

County_____ State_____ Date of Interview_____

1. How many years have you grown potatoes for market?_____ years.

2. How many crop acres do you have in your present farm?_____ acres.

3. How many acres of potatoes did you plant in 1950?_____ acres.

4. in 1951?_____ acres.

5. How many acres of potato land did you rent in 1951?_____ acres.

6. Has there been any change in the number of acres you farm since 1940?

Yes ( ) No ( )

If yes:

7. When did the change (or changes) take place? _____

8. How many acres did you farm before the (each) change?_____

Now I'd like for you to try and remember some of your potato acreage and yield figures for the past ten or twelve years.

9. Did your potato acreage increase, decrease, or remain the same during the war years (1943, 1944, 1945)?

Increase ( ) Decrease ( ) No change ( )

10. How about yields during these same years? Increase ( ) Decrease ( ) No change ( )

11. What about since the war, say from 1946 to the present, have you planted more acres? ( ) fewer acres? ( ) the same? ( )

12. And the yields again, have they increased? ( ) decreased? ( ) remained about the same? ( ) since the war.

If acreage changed during the war years:

13. Looking back to this acreage change during the war years, why did you make this change?

_____

_____

_____

_____

If acreage changed since the war:

14. And the acreage change since the war, how do you explain this change?

If yields have changed:

15. And how do you account for the change in yields which you've told me about?

16. Do you think that these wartime acreage and yield figures would have been any different if there hadn't been the price support program on potatoes?

Yes ( ) No ( ) Don't know ( )

If yes:

17. How or in what ways different?

If acreage declined during the war years:

18. Did the wartime high prices on other things you could produce have anything to do with your cutting down your potato acreage?

Yes ( ) No ( ) Don't know ( )

If yes:

19. Prices on what commodities specifically?

20. In (increasing, decreasing) your potato acreage, what crops have you (cut back, increased)?

21. If you were to cut down or do away with your potato acreage, what do you think you would produce instead of potatoes?

22. From the standpoint of cash returns, and your soil, climate, and crop system, are these fairly good alternatives to growing potatoes?

Yes ( ) No ( ) Don't know ( )

23. What is it that makes you prefer to stick to potatoes?

24. Turning now to the government price support program, do you think it was a good or bad thing for you?

Good ( ) Bad ( ) Don't know ( )

25. Why do you think this?_____

26. Was there anything about the program which you especially liked?

27. Was there anything about it which you especially disliked?

28. How fair do you think the acreage allotments were? _____

29. How well do you think they worked? _____

30. About how many growers around here do you think did not cooperate in the Program?

Very few, if any ( ) Some ( ) Quite a few ( )

31. How fair do you think the grade restrictions in the marketing agreements were?

32. Do you think that the average price of potatoes, from 1943 through 1950, was raised by the price support program?

Yes ( ) No ( ) Don't know ( )

33. Approximately what price did you receive for your 1950 crop potatoes? _____

34. Do you feel that the price you received made it worth your while to comply with your acreage allotment?

Yes ( ) No ( ) Don't know ( )

35. If farm prices are to be supported in periods of low prices, do you think some restrictions are necessary?

Yes ( ) No ( ) Don't know ( )

If no:

36. Why do you say this? _____

_____

If yes:

37. What type of restriction would you prefer?

Acreage controls ( )

Grade restrictions ( )

Marketing quotas ( )

Other (specify) _____

38. Would you favor a program which took the form of direct income payments to potato growers instead of price supports?

Yes ( ) No ( ) Don't know ( )

39. Why do you say this? _____

_____

_____

40. Would you agree to send 25% less potatoes to market this year for a price 50% higher than you received for your 1950 crop?

Yes ( ) No ( ) Don't know ( )

41. What are your reasons for saying this? _____

_____

_____

42. Have your production or marketing practices in potatoes been any different since 1943 from what they were before 1943?

Yes ( ) No ( ) Don't know ( )

43. Have you made changes in the use of insecticides? Yes ( ) No ( )

44. In the use of fertilizer? Yes ( ) No ( )

45. Have you changed your crop rotation for potatoes? Yes ( ) No ( )

46. What about the use of fallow for potatoes, have you changed it?
Yes ( ) No ( )

47. Any change in the variety grown? Yes ( ) No ( )

48. Method of harvesting potatoes? Yes ( ) No ( )

49. Any change in your grading practices? Yes ( ) No ( )

50. Any other important changes which you think of? (Specify) _____

_____

If any changes:

51. Why have you made these changes? _____

_____

_____

52. Do you think you would have made all of these changes if there had been no price supports?

Yes ( ) No ( ) Don't know ( )

53. Do you think the government potato program has affected large and small growers differently?

Yes ( ) No ( ) Don't know ( )

If yes:

54. How or in what ways? _____

_____

_____

_____

55. Many growers, not necessarily around here but all over the country, seem to have grown bigger and more efficient under the program. Why do you think this has happened?

_____

_____

_____

56. If there had been no price supports, do you think your income from potatoes would have been

Higher? ( ) Lower? ( ) About the same? ( )

57. Why do you think that? _____

58. Now I know this is just guesswork, but how about taking a guess on the price you'll get for this year's crop? _____.

59. Would you agree now to sell your crop for _____?

Yes ( ) No ( ) Don't know ( )

If no:

60. Well then, what price would you sell your crop for now? _____

61. All right, what about this? I'll toss a coin; if it comes up heads you get _____ for your crop, tails you get _____. Would you rather take this chance or take a firm offer of _____?

Chance ( ) Firm offer ( ) Don't know ( )

62. Let's change that a little so that tails gives you _____ and heads gives you _____. Now would you take the chance or the firm offer of _____?

Chance ( ) Firm offer ( ) Don't know ( )

63. How many acres have you (will you have) in potatoes this year? _____

64. If _____ were the guaranteed price, and you had known it in plenty of time to adjust your plans, how many acres do you think you would have planted this year? _____

65. If _____ were a guaranteed price, how many acres? _____

66. If 90% of parity were guaranteed on potatoes for the next five years, about how many acres would you put in? _____

67. About how much fertilizer will you put on spuds this year? _____ per acre.

68. How many times will you probably dust or spray? _____

69. How much fertilizer would you use if _____ were the guaranteed price? _____ per acre.

70. If _____ were guaranteed? _____ per acre.

71. How many times would you dust or spray if _____ were guaranteed? _____

72. If _____ were guaranteed? _____

(Michigan State Questionnaire)

-1-

Name_____ County_____ No._____

1. We are interested in getting some information on your production practices such as the use of certified seed, the source of your seed, the bushels of seed planted per acre, and the yields. (Draw line in squares that do not apply).

	Acres	Variety	Seed bu/a c-w-m	Source Own or Buy	Irriga-tion (Acres)	Fert.and Analysis Per Acre	Manure Loads Per A.	Yield per Acre	Previous Year Crop Disposition	Previous Year Fert.& Manure	Previous Year Type of Cover
	CERTIFIED SEED*										
1952								XXX			
1951											
1950									XXX	XXX	XXX

*(Indicate no. of acres grown for certification)

ONE YEAR FROM CERTIFICATION

1952								XXX			
1951											
1950									XXX	XXX	XXX

MORE THAN ONE YEAR FROM CERTIFICATION (Years_____)

1952								XXX			
1951											
1950									XXX	XXX	XXX

2. (If certified seed was used last year) From what section (state or country) did your certified seed come for last year's crop? _____

3. On what type of soil are your potatoes principally grown?
Sandy ( ) Sandy Loam ( ) Clay Loam ( ) Clay ( ) Muck ( )

4. What value in dollars would you place on your specialized potato buildings and equipment? (Use value at well-attended farm auction) Potato Planter $_____ Potato Digger $_____ Potato Sprayer $_____ Potato Duster $ _____

Potato Grader $_____ Potato Washer $_____ Potato Brusher $_____

Irrigation $_____ Storage Building $_____ Dump Wagons $_____

Other_____$_____

5. In your opinion, how do you think the 1952 potato acreage in Michigan will compare with last year's acreage? Do you think it will be larger, smaller, or about the same?

Larger ( ) Smaller ( ) About the same ( )

6. (If larger or smaller) By about what percentage do you think the crop will be larger (smaller)? _____%

7. About what time of the year do you usually decide how many acres you'll plant?

_____

8. What are the principal factors that determine whether your 1952 acreage of potatoes will be increased, decreased, or kept about the same, as compared with your 1951 acreage? _____

_____

9. Anything else? _____

10. (Ask, if applicable-based on answer above) Where do you get this information?

_____

11. When you were planning on how many acres of potatoes to plant this year what did you figure as the cost per acre? $_____

12. About how much cash or out-of-pocket cost did (or do) you figure per acre? $____

13. About what cost did (do) you figure per acre for
Seed $_____ Spray and dust $_____ Power and equipment $_____

14. When you are planning for this year's acreage what yields per acre were you expecting to obtain this year? _____bu.

15. Did you know that the U. S. Department of Agriculture recommended an increase of six percent in the acreage of potatoes in Michigan for 1952?

Yes ( ) No ( )

16. Did you know that Michigan growers are expected to plant 10 percent fewer acres of potatoes than last year?

Yes ( ) No ( )

Now I'd like to ask a question or two about your last year's crop or the one you dug last fall.

17. What were your principal hazards in the production of last season's crop of potatoes? That is, things that worried you or kept you from getting as high a yield or as profitable a year as you might have had.

	Free Response	Follow Up
1. Excess rainfall.....	( )	( )
2. Drought.....	( )	( )
3. Insects.....	( )	( )
4. Blight.....	( )	( )
5. Labor.....	( )	( )
6. Early freeze.....	( )	( )
7. Late spring.....	( )	( )
8. Other (specify)_____		

(For each source not mentioned as a free response ask:) Did you have trouble with _____? (Record response in follow-up column).

18. In your harvest of potatoes did you use family labor, local help, or migrant labor? (Check each that applies) Family ( ) Local ( ) Migrant ( )

19. What is the charge per bushel for picking up potatoes? _____¢

20. During what months did you sell the potatoes that you dug last fall and about what portion of the total did you sell each month? (Did you sell any in (Sept)? What percent of your total crop?)

July (%) Aug (%) Sept (%) Oct (%) Nov (%) Dec (%)

Jan (%) Feb (%) March (%) April (%) May (%)

21. (If potatoes were sold after Nov.) Where did you store your potatoes and about how many bushels did you put into each type of storage?

Own House Cellar_____bu.; Barn_____bu.; Remodeled Barn_____bu.;
Specialized Storage_____bu.; Other_____-_____bu.

Rent Barn_____bu.; Commercial Storage_____bu; Other_____-_____bu.

22. What factors influenced your decision on whether to store or not?_____

_____

23. Anything else?_____

24. (Ask, if applicable) Where do you get the information to decide?_____

_____

25. About what share of your last fall's crop was sold as field-run or ungraded?

_____

26. On a field-run basis or as put into the bin about what percent of your 1951 crop would have graded?

U.S. No. 1 - 1 7/8" & up _____%
U.S. No. 1 - Size B _____%
U.S. No. 2 _____%
Culls _____%

27. What was the percent of loss (rot) in storage from late blight? _____%

28. What were the principal causes of "pickouts" or failure to make No. 1? What did you do with the _____?

	Free Response	Follow Up	Disposition
1. Scab.....	( )	( )	_____
2. Small size.....	( )	( )	_____
3. Cuts.....	( )	( )	_____
4. Hollow heart....	( )	( )	_____
5. Rot.....	( )	( )	_____
6. Wireworm.....	( )	( )	_____
7. Green (sunburn).	( )	( )	_____
8. Other (specify).	( )	( )	_____

(For each source not mentioned as a free response ask: Did you have trouble with_____? Record answer in follow-up column) (Get Disposition)

And now we'd like to get information on the type of dealer who buys your potatoes who grades and packs etc. We are planning on making a dealer study and would also like to have the names of any dealers who bought from you during the past season.

Names* of and Types of Dealers	Percent of Total Crop	Where Farmer Gave Possession	Who Graded and Packed	Bag Sizes % Sales of Each Size	Bags Furnished by Farmer or Buyer	Minimum size of potatoes packed	Final Destination For Consumption
		U.S. No. 1 or U.S. Commercial (Indicate which)					
U.S. No. 2							

* For use in dealer survey.

You were probably aware of the OPS price ceiling placed on potatoes in January.

30. Did this ceiling have any effect on the price you received for your potatoes? (Check MSC Q 20). Yes ( ) No ( ) Didn't have potatoes ( )

If yes:

31. How much?_____

32. Did you make any changes in your marketing practices as a result of price ceilings? Yes ( ) No ( ) Didn't have potatoes ( )

If yes:

33. In what way or ways?_____

_____

Most of the following questions regard your attitudes toward various programs or policies.

34. It is felt by many CONSUMERS that if a commodity such as potatoes has received PRICE SUPPORTS this commodity should also have PRICE CEILINGS. Do you agree with this feeling?

Yes ( ) No ( ) No opinion ( )

35. The County P.M.A. (or old Triple A) Office set up acreage allotments for potatoes in 1950. Did you receive an allotment?

Yes ( ) No ( ) Don't know ( )

If yes:

36. How many acres was your allotment? _____acres. Don't remember ( )

37. (Check back to MSC Question 1) I notice that you (stayed, or did not stay) within your allotment. Would you mind telling me why you (stayed, or did not stay) within your allotment for potatoes? _____

_____

38. The last year of price support for potatoes was on the 1950 crop. About what percent of that crop did you sell to the government?_____% None ( )

39. Why didn't you sell 100% to the government? _____

_____

If some were sold:

40. What were the principal reasons why you sold any potatoes to the government? (If says because could get more money that way, then ask why?)

_____

_____

41. From what you knew of it were you in favor of the federal marketing order No. 60 as it operated during the marketing of the 1950 crop?

Yes ( ) No ( ) No opinion ( )

42. Why did you (favor, or not favor) it? _____

_____

43. Would you mind telling me how you voted on the marketing order for the 1950 crop?

For ( ) Against ( ) Didn't vote ( ) Don't remember ( )

44. How did you vote on the marketing order in the last referendum i.e. on the 1951 crop? For ( ) Against ( ) Didn't vote ( ) Don't remember ( )

45. In order to receive support for potatoes at 1950 levels, would you vote for a federal marketing order for potatoes in Michigan today?
Yes ( ) No ( ) Don't know ( )

46. There was some talk that many farmers were not marketing their 1950 crop of potatoes legally according to the rules of the federal marketing order. Now we are not interested in names but did you actually know of violations of the marketing order?
Yes ( ) No ( )

If yes:

47. What were the types of violations? _____

48. Do you believe that a majority of the potato producers should have the right to decide for each potato producer what grades that he can sell?
Yes ( ) No ( ) Don't know ( )

49. (Why do, or why don't) you think this? _____

_____

50. There has been some discussion of using marketing quotas in connection with price support programs. Would you mind telling me just what the term "marketing quota" means to you? _____

_____ Don't know ( )

If the producer has an opinion on quotas:

51. In order to receive price supports for potatoes at 1950 levels, would you vote for marketing quotas for potatoes?
Yes ( ) No ( ) Don't know ( )

52. Do you believe that a majority of the potato producers should have the right to decide for each potato producer the amounts of potatoes that he can sell?
Yes ( ) No ( ) Don't know ( )

53. (Why do, or why don't) you think this? _____

_____

54. If there is to be a support program, should there be a limit on the total amount of money that a potato farmer could receive from the government under the support program?
Yes ( ) No ( ) Don't know ( ) Against support ( )

55. Would you favor a state tax on potatoes at, say one cent per cwt., to be used for the advertising and promotion of Michigan potatoes?
Yes ( ) No ( ) Don't know ( )

And now we would like some general information about the farm and about you so that we can divide the responses people give according to the age of the farmer and so on.

56. First, would you mind telling me how old you are? _____yrs.

57. About what year did you start farming on your own? _____

58. (Ask, if applicable) I notice that you were farming before and during the 30's. Would you mind telling me whether you were hit pretty hard during the depression or not? (Probe and get story of his depression experiences) _____

_____

_____

_____

59. How many years in the last ten (since 1942) did you raise no potatoes?_____yrs.

60. What farm crops did you grow other than potatoes? How many acres of each in 1951

Potatoes (MSC Q.1)_____	Dry Beans_____	Sweet corn_____
Corn (all) _____	Soybeans_____	Berries_____
Wheat_____	Snap beans_____	Fruit_____
Oats_____	Celery_____	Mint_____
Barley_____	Onions_____	Other_____
All Hay &	Lettuce_____	
Tillable pasture_____	Cucumbers_____	Tillable Acres_____
		(Check with Minn. Q 2)
		Non-tillable Acres_____

61. How many acres on your farm are suited to potatoes?_____acres.

62. What is the average number of livestock that you fed in 1951?

Dairy cows_____	Ewes_____	Other_____
Dairy heifers_____	Hogs (No. of litters)_____	Other_____
Beef Feeders_____	Laying Hens_____	Other_____
Beef cows_____		

63. About how many days did you work off your farm or do custom work last year?
_____days

Now we've asked a lot of questions but we'd like to ask you to give in your own words what part, if any, you think the government should play in:

Grades_____

_____

Subsidies_____

_____

Agricultural production_____

_____

Comments:_____

_____

Enumerator_____

APPENDIX E

MATERIAL USED IN MAIL SURVEY

MICHIGAN STATE COLLEGE
EAST LANSING

DEPARTMENT OF AGRICULTURAL ECONOMICS

January 9, 1953

Dear Cooperator:

My thesis on potato marketing is progressing very nicely. I want to again express my appreciation to you for taking time to answer the many questions that were asked you last spring.

Enclosed is the November issue of Michigan Farm Economics. On page two you will find an article on potato marketing orders based on the answers by you and other farmers to a few of the questions.

In order to complete my study I would like to ask a few more questions about your 1952 potato crop and your present opinions.

I would appreciate your giving me your best answers to the questions on the enclosed sheet. Even if you do not wish to make a "best guess" on one or more of the questions please answer the rest and return to me in the stamped and addressed envelope.

Sincerely yours,

A. Dewey Bond
Graduate Student
Agricultural Economics Department

ADB:pmj

Enclosures

Farm Number _____

1. Your 1952 Potato Crop

Last spring (1952) your intentions were to plant	You actually planted in (1952)	Average Yield per acre planted (1952)	Approximate percent that would make U.S. No. 1 grade (1952 crop)
(Acres)	(Acres)	(Bushels)	(Percent)

2. (a) From the 1951 crop you sold about [ ] % of your crop before Jan. 1, 1952.

   (b) From the 1952 crop I sold about [ ] % of my crop before Jan. 1, 1953.

3. Please check any of the following organizations to which you belong:

   Farm Bureau..... [ ] Farmers Union.... [ ] Other _____

   Farm Cooperative. [ ] Grange..... [ ] _____

4. For the 1953 crop would you prefer: (CHECK ONE)

   No Supports..... [ ]

   Support at 60 percent of parity (About $1.03 per bu.)..... [ ]

   Support at 90 percent of parity (About $1.55 per bu.)..... [ ]

   Support at 100 percent of parity (About $1.72 per bu.)..... [ ]

5. About what do you expect will be the price for potatoes this coming season?

   My "guesstimate" of my 1953 farm price of potatoes at digging is [$] per bu.

If you would like future reports from the complete study please give your name and address.

Name _____

Address _____

_____

REMINDER

This is just a reminder of the questionnaire that you received from me about two weeks ago.

I would certainly appreciate your taking a couple of minutes to complete the blank and return it to me so that I can include it in my study.

If you have sent in your questionnaire while we were getting this reminder off to you, please disregard this note.

Thanks for your cooperation,

Dennis Gould

This reminder was mailed January 26, 1953

MICHIGAN STATE COLLEGE
EAST LANSING

DEPARTMENT OF AGRICULTURAL ECONOMICS

February 5, 1953

Dear Cooperator:

Returns from my mail questionnaire have been very good but still short of my hope of receiving answers from all of you in the original survey. I would like to visit with each of you, again, personnally but that is impossible because of the expense.

Since you may have misplaced the questionnaire, I am enclosing another one with a stamped and addressed enevelope.

If some of the questions are not clear or are unanswerable, please skip them and answer the remainder. It will only take a few minutes of your time but will be of great value to me.

If you have already answered the questionnaire, just disregard this letter. You can be assured that your answers will be kept confidential and will be used only by me and in averages with other growers.

Sincerely yours,

A. Dewey Bond
Graduate Student
Agricultural Economics Department

ADB:pmj

Enc.

BIBLIOGRAPHY

Allender, Chester R., Potatoes for Livestock Feed. Production and Marketing Administration, United States Department of Agriculture. Miscellaneous Publication No. 676, 1948, 45 pp.

Bemis, Kris, "The Problem of the 'Seventh Bushel'." Unpublished paper read before a meeting of the Michigan Potato Growers, East Lansing, Michigan, July 24, 1950.

Boger, L. L., "Selling Under Ceilings," Michigan Farm Economics, 110: 1-2, February, 1950.

Brannan, Charles F., Statement before Congress, April 7, 1949. Reprint from the Congressional Record, 7 pp.

_____, Statement before the House Committee on Agriculture, April 25, 1949. Reprint from the Congressional Record, 3 pp.

Cochrane, Willard W., "A Theoretical Scaffolding for Considering Governmental Pricing Policies in Agriculture," Journal of Farm Economics, 35: 1-14, February, 1953.

Cravens, M. E., "Trends in Michigan's Potato Industry," Michigan Farm Economics, 109: 1-2, January, 1952.

Davis, Chester C., "What We Have Learned in 15 Years of Farm Programs." Unpublished paper read before the Twelfth Annual National Farm Institute, Des Moines, Iowa, February 17, 1950.

Dickison, W. E., Trends in Michigan Agriculture, 1900-1945. Unpublished Ph.D. Thesis, Michigan State College, East Lansing, Michigan, 198 pp.

Fox, Karl, "The Measurement of Price Support Costs," Journal of Farm Economics, 33: 470-484, November, 1951

Hathaway, Dale E., "Farmers' Knowledge, Attitudes, and Agricultural Policy." Unpublished Doctor's dissertation, Harvard University, Cambridge, Massachusetts, 1952, 236 pp.

Hathaway, Dale E., and E. E. Peterson, Michigan Farmers and the Price Support Program. I. Farming Under Price Supports. Michigan State College Agricultural Experiment Station, East Lansing, Michigan, Technical Bulletin 234, 1952, 23 pp.

Hathaway, Dale E., et al., Michigan Farmers and the Price Support Program. II. Farmers' Attitudes Toward the Support Program. Michigan State College Agricultural Experiment Station, East Lansing, Michigan, Technical Bulletin 235, 1952, 40 pp.

Hill, Elton B. and Lauren H. Brown, Principles of Farm Management. Ann Arbor, Michigan: Edward Bros., Inc., 1947, 201 pp.

_____, and Russell G. Mawby, Census Maps of Michigan, 1950. Agricultural Economics Department, Michigan State College, 1952, 46 pp.

Hirsch, Werner Z., "Marketing Agreements and Cooperative Marketing: Some Comparative Aspects," Journal of Farm Economics, 32: 216-224, May, 1950.

Kettering, Darwin G., "Participation in the Federal Price Support Program by Michigan Farmers." Unpublished Master's Thesis, Michigan State College, East Lansing, Michigan, 1951, 134 pp.

Kross, John I., Federal Potato Marketing Order Number 60 for North Dakota, Minnesota, Wisconsin, and Michigan. Department of Agricultural Economics, University of Wisconsin, Madison, Wisconsin, 1950, 20 pp.

Moe, Edward O., New York Farmers' Opinions on Agricultural Programs. New York (Cornell) Extension Bulletin 864, 1952, 62 pp.

Moore, H. C., Better Potatoes for Michigan. Michigan State College Extension Service, East Lansing, Michigan, Extension Bulletin 49, 1949, 18 pp.

North Central Potato Committee, Grade and Size Regulations, Marketing Order Number 60. Mimeographed report, 1950, 6 pp.

Pearson, Frank A., and Kenneth R. Bennett, Statistical Methods. New York: John Wiley and Sons, Inc., 1942, 443 pp.

Resolutions Adopted at the 32nd Annual Convention of the American Farm Bureau Federation. Dallas, Texas, 1950, 36 pp.

Scott, Forrest E., and Herbert W. Mumford, Sr., Problems in Marketing Potatoes: Preliminary Results of Some Recent Research. Bureau of Agricultural Economics, United States Department of Agriculture, 1949, 60 pp.

Stasser, Carl W., "Effects of the Price Support Program on Production Practices on Michigan Farms in 1950." Unpublished Master's Thesis, Michigan State College, East Lansing, Michigan, 1951, 113 pp.

Stine, O. C., "Discussion - Agricultural Price Policy," Journal of Farm Economics, 34: 627-29, December, 1952.

Taylor, Porter R., Marketing Agreement Programs for Fruits and Vegetables. American Farm Bureau Federation, mimeographed publication, 1949, 7 pp.

_____, "The Present Status of Potato Programs." Unpublished paper read before the American Farm Bureau Federation Fruit and Vegetable Conference, Dallas, Texas, December 11, 1950.

Thomsen, F. L., Agricultural Marketing. New York: McGraw-Hill Book Company, 1951, 483 pp.

United States Congress, House of Representatives, Potato Allotments and Marketing Quotas. Hearing before the Special Committee of the Committee on Agriculture, House of Representatives, Pursuant to H.R. 5751. 81st Congress, 1st Session, July 29, 1949. Washington: Government Printing Office, 1949, 37 pp.

United States Congress, Senate, Marketing Quotas for Irish Potatoes. Hearings before a Subcommittee of the Committee on Agriculture and Forestry Pursuant to S. 2634 and S. 3049. 81st Congress, 2nd Session, March 15, 16, 17, 20, and 21, 1950. Washington: Government Printing Office, 1950, 199 pp.

_____, Parity Handbook. Document No. 129, 82nd Congress, 2nd Session, 1952. Washington: Government Printing Office, 1952, 29 pp.

_____, Repeal of Mandatory Egg and Potato Price-Support Programs and Amendment of the Commodity Exchange Act. Hearings before a Subcommittee on Agriculture and Forestry Pursuant to S. 2482 and S. 1751. 81st Congress, 1st Session, September 15, 19, and 20, 1949. Washington: Government Printing Office, 1949, 119 pp.

United States Department of Agriculture, Agricultural Statistics (1941 and 1948). Washington: United States Government Printing Office.

_____, Annual Summary, Acreage, Yield, and Production of Principal Crops, by States. Bureau of Agricultural Economics, Years 1950-1952.

_____, Consumption of Food in the United States, 1909-1948. Bureau of Agricultural Economics, U.S.D.A., Miscellaneous Publication No. 691, 1949, 196 pp.

_____, Irish Potatoes, Price Support and Related Operations, Fiscal Branch, Production and Marketing Administration, mimeographed publication, 1950, 29 pp.

_____, "North Central Potato Order Terminated." Production and Marketing Administration, news release 1858-51.

_____, "Potato Growers in the North Central States Area Approve Proposed Amendments to Marketing Order No. 60." Production and Marketing Administration, news release 2432-50.

_____, Potato Marketing Order Referendum Ballot. Production and Marketing Administration, 1950, 10 pp.

_____, Potato Preferences Among Household Consumers. Bureau of Agricultural Economics, U.S.D.A. Miscellaneous Publication No. 667, 1948, 119 pp.

_____, Potatoes, Summary of 1950 Census Data on Acreage, Production, and Yield, by Size of Farms. Fruit and Vegetable Branch, Production and Marketing Administration, 1952, 57 pp.

_____, Price Programs of the United States Department of Agriculture. Production and Marketing Administration, Agriculture Information Bulletin No. 13, 1950, 65 pp.

_____, Questions and Answers on Proposed Price Support Program. Office of the Secretary, 1949, 10 pp.

_____, Revised Estimates, 1944-49, Acreage, Yield, and Production of Principal Field Crops. Bureau of Agricultural Economics, Statistical Bulletin No. 108, 1952, 44 pp.

_____, Summary of the Family Farm Policy Review. Office of the Under Secretary, 1952, 16 pp.

_____, The National Food Situation. Bureau of Agricultural Economics, NFS-62, October-December, 1952, 35 pp.

_____, The National Food Situation. Bureau of Agricultural Economics, NFS-64, April-June, 1953, 21 pp.

_____, The Potato Price Support Situation. Production and Marketing Administration, mimeographed publication, 1949, 19 pp.

_____, The Potato Situation. Office of the Secretary of Agriculture, mimeographed publication, 1950, 9 pp.

United States Department of Commerce, 1950 United States Census of Agriculture, Michigan. Bureau of the Census. Washington: Government Printing Office, 1952, 322 pp.

Waite, Warren C., and Harry C. Trelogan, Agricultural Market Prices. New York: John Wiley and Sons, Inc., 1951, 440 pp.

Wolf, Alois F., "Measuring the Effects of Agricultural Advertising," Journal of Farm Economics, 26: 327-347, 1944.