

ABSTRACT OF A THESIS

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SCHOOL-COMMUNITY CANNING PLANTS
IN NEGRO SCHOOLS
OF MISSISSIPPI

Submitted by
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In partial fulfillment of the requirements
for the Degree of Master of Science
Colorado
Agricultural and Mechanical College
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ABSTRACT

A large proportion of the population of Mississippi consists of Negroes who are in the low income group and whose health standards are low because of poor diets. Ninety per cent of these people live on farms and depend on farming for their living.

In 1926 the school-community cannery movement was started in Georgia for the purpose of helping to improve economic and health standards among people in low income groups. By 1945 more than 500 school-community canneries had been established in Georgia. This example was followed in North Carolina, South Carolina, and California.

Need for study

In 1931 the first community cannery was established in Mississippi for the use of Negro farm families. Since that time 18 canneries have been established and are now in operation. The program, however, has been limited and in order to extend its benefits the present investigation has been undertaken.

The specific problem of this study is: What Program Can Be Recommended for the Establishment, Use,

Operation, Management, and Financing of School-Community Canneries for Negro Farm Families in Mississippi?

This problem subdivides into the following subordinate questions:

- A. What progress has been made in establishing school-community canning plants?
- B. What are the potential needs for such canneries?
- C. What factors determine the success of such school-community canning?
 - a. As revealed by a study of a number of successful canneries?
 - b. As given in authoritative literature?
- D. What is the essential equipment found in a small successful canning plant?
- E. How is the equipment arranged in such canneries?
- F. How are such plants financed?
- G. What plan can be recommended for the organization, operation, use, management, and financing of school-community canning plants in Mississippi?

Methods and procedure

Three sources of data were used. The first was 109 certified teachers of vocational agriculture who were held responsible for community canning programs in Mississippi. The second source was four community canneries whose programs were rated as being outstanding by the Alcorn Agricultural and Mechanical College. The third source was pertinent research reports on community canning projects in other states.

Three methods were used in gathering data. The questionnaire method was used to gather information from teachers of vocational agriculture. Directed visitation was the method used to gather information from the four outstanding canning centers. Reviews were made of research reports on community canning programs.

The data were summarized and presented in tables for analysis and discussion.

Findings

1. Forty teachers responded to the questionnaires. Eighteen reported established canneries, eight reported doing some canning but not having organized community centers, and 14 reported no canning activities or establishments.

2. Communities with established canneries varied in size from 60 to more than 700 families.

3. Twelve of the canneries were housed in buildings used exclusively for this purpose while six were in buildings used for additional purposes.

4. One cannery was established in 1935, three in 1943, 10 in 1944, and four in the first four months of 1945.

5. The average floor area of the 18 canneries was 1,357 square feet and would accommodate 19 people working at the same time.

6. The cost of the essential equipment for the average cannery was \$986.00.

7. There were 6,608 farm families in the areas doing canning but only 2,440 were being reached by the services of these plants.

8. The canneries operated an average of 7.5 hours per day, three days per week in summer, and seven hours per day, one day per week in winter.

9. The essential major equipment consisted of: vats for washing, blanching, and exhausting; preparation, filling, and sealing tables; one electric sealer; hand sealers; retorts; and steam boilers.

10. Equipment was usually arranged in progressional order of canning operations.

11. Fourteen of the 18 established canneries were financed almost wholly through the War Production Training Fund.

Recommendation

An analysis of the findings together with data contained in Chapter II resulted in the following recommendations:

1. That the school-community cannery movement be promoted in Mississippi.

2. That new canneries be frame structures 30 feet by 45 feet with concrete floors equipped with one boiler, three retorts, four vats, one hand sealer, and one electric sealer arranged for production sequence.

3. That a unit of instruction covering food conservation be included in the courses in vocational agriculture and home economics.

4. That the following success factors be used as a guide for planning, establishing, and operating canning programs: (a) the canning activities should be a part of the educational program, (b) public schools should sponsor the program continuously, (c) canneries should operate the year round, and (d) vocational agricultural teachers should supervise the programs and be trained in the necessary sciences

and techniques by the Alcorn Agricultural and Mechanical College.

5. That interest in a school-community cannery be developed through discussions of its importance and usefulness in every class and group meeting.

6. That local committees be organized to devise plans for securing necessary funds for establishing and operating a community cannery.

The adoption of the foregoing recommendations should provide the Negro communities in Mississippi with a program for the establishment, use, operation, management, and financing of school-community canneries.

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T H E S I S

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I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY
SUPERVISION BY John A. Jackson

ENTITLED SCHOOL-COMMUNITY CANNING PLANTS IN NEGRO
SCHOOLS OF MISSISSIPPI

BE ACCEPTED AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE
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Chapter I
INTRODUCTION

Today, when the health and welfare of all the people is so important in the life of the nation, it is timely that attention be given to the ways and means of providing people with understanding and ability to secure adequate diets. (6:1)

Background

It has been estimated that 90 per cent of the Negroes of Mississippi live on and derive their livings from farms. These farm families for the most part are in the low income group and many of them rely on public assistance during that part of the year when foodstuffs cannot be secured from the farm.

Public health officials have found that the persistent illness of the Negro is caused by inadequate diet.

The problem of improving the living standards of Negroes by helping them obtain their food at lower cost and the problem of helping them to improve their health standards by bringing the needed variety of food into their diets have been attacked by educational leaders in the South. School-community canneries have

been established in a number of rural centers of southern states as a means of solving these problems.

Community canning had its beginning in Georgia in 1926 when two schools made the initial effort by experimenting with community food conservation programs.

In the beginning these canning plants were crude, temporary, out-of-door affairs, but both schools succeeded in getting thinking and experience centered on the details of the problems of community canning. These experiments revealed that the improvement in standards of living in these communities could best be made by teaching farm people to produce and conserve their home food supply and leave the commercial aspect of canning to others.

From these early beginnings the community canning program took its direction. Plants have grown up as school laboratories where the problems of food processing are taught and where community canning is done. This program met with favor wherever tried, and was expanded to all parts of Georgia.

In 1944 there were more than 500 school-community canning plants in operation in Georgia. The use of these food preserving centers made available a greater variety and greater quantity of foodstuffs for the farm families of the low income group, which resulted in improved health conditions. (11:5)

In 1940 the College of Agriculture of South Carolina made a study of 20 local community canneries in that state. The report showed that South Carolina had followed the Georgia pattern in establishing school-community canneries and that there has been a steady growth in the use of the canneries by the farm families.

The State College of North Carolina published a bulletin in 1943 in which a review of local canneries was made. The bulletin showed that community canneries in North Carolina have been a factor in the economic stability of the rural population because of the program of food preservation as conducted in that state by local schools.

The school-community cannery had its beginning in the Negro schools of Mississippi in 1931 with the inauguration of a canning program in Shelby, Mississippi. This plant operated successfully for two years. In 1933 interested persons in Louisville, Mississippi, were successful in securing canning equipment to establish a community cannery in that city. Economic conditions of the time would not permit the completion of the housing facilities for the equipment.

From these two efforts in Mississippi the idea of a school-community cannery has spread to many localities and has resulted in the establishment of a

number of community canneries in Negro schools in Mississippi.

Need

It appears that there is a real value in having community canneries easily available to Negro farm families in Mississippi. These canneries have been beneficial to the low income group in other states by providing a means of preserving available surplus food.

A community cannery could make a major contribution to the health and financial condition of these Negro farm families in Mississippi. In order to do this it is necessary to make good canning facilities easily available at a time when surplus food should be preserved. Successful canning depends upon the maintenance of the best possible conditions. Further difficulties to be overcome are maintaining low costs by making large quantity purchases and by using surplus food products from the farms.

Problem

In order that Mississippi communities may benefit from a program of food conservation, they need guidance and assistance in establishing and operating community canneries. The need for this help gives rise to the major problem of this study:

What program can be recommended for the establishment, operation, use, management and financing of school-community canning plants for Negro farm families in Mississippi?

Subordinate questions are:

1. What progress has been made in establishing school-community canning plants for Negro farm families in Mississippi?
2. What are the potential needs?
3. What factors determine the success of school-community canneries?
4. What is the essential major equipment found in a small and successful school-community cannery?
5. How are such plants financed?
6. What plan can be recommended for the organization of school-community canning plants for Negro farm families for Mississippi?

A review of literature, reported in the following chapter, has revealed information that is pertinent to the above mentioned problems.

Chapter II

REVIEW OF LITERATURE

School-community canneries have become quite popular during the present war period because of the great necessity of getting farm families to produce and preserve as much food as possible. School-community canneries were in operation, however, before December, 1941.

One of the most extensive publications dealing with school-community canneries was published in April, 1943, by the State Board for Vocational Education of Georgia. The publication was prepared by Wheeler and Duncan (11) in which they made the following comments regarding the development of the canneries in Georgia:

Community canning had its beginning in Georgia in 1926. At that time two schools made the initial beginning: the Line School in Franklin County and the Shoal Creek School in Hart County. These were try-out experiments in community food preservation, and each had its own objectives.

From these early experiments, the school-community canning program took its direction. Plants have grown up as school laboratories where the problem of food conservation is taught and where community canning is done. This program met with favor wherever tried, and was expanded to all parts of the State. It has made food preservation a family enterprise and shifted the burden of food preservation from one person

in the home to the family group (11:4).

This 78 page publication not only gives an account of the development of school-community canneries in Georgia, but also is a complete treatise on the subject of school-community canneries. It contains a chapter on "Planning the Family Food Budget For Community Canning in Community Plants." It also contains a chapter on "Operating the School-Community Canning Plant." The chapter on "Using Community Canning Plants and Equipment" is a most thorough discussion of efficient use of these canneries. The chapter on "Procedure for Canning Different Foods" forms an excellent and reliable guide for canning. Finally, the chapter on "Establishing Community Canning Plants" gives full and complete directions and floor plans. It describes how to finance canning plants.

In January, 1944, the United States Department of Agriculture and the United States Office of Education called a "Food Preservation Work-Shop Training Conference" to be held in Peoria, Illinois. Since the state of Georgia had served as a pioneer in this field and had done more than any other state in the nation toward promoting community food preservation centers, it was logical to select as the main speaker for the conference a man from the faculty of the University of Georgia who was mostly responsible for

the development of the program. This man was Dr. Paul W. Chapman, Dean of the School of Agriculture. In his address to the conference he made the following statements:

Georgia now has more than 500 community food preservation centers in operation. At this time, no other state in the Nation has as large a number. During the war time food emergency these plants have proved a boon to people of the communities where they are located. Food rationing brought these people few problems; they have been able, without difficulty, to maintain a liberal diet. The plants have eliminated waste and stimulated food production and made it comparatively easy to meet the requirements of an adequate family budget for canned and processed foods. By thus providing for themselves, these families have contributed to the war effort in two ways: (1) they have added to the nation's total food supply, (2) they have decreased the demand upon the service of those persons in our labor forces who are engaged in producing and processing, and distributing food supplies (3:1-2).

In regard to the establishment of community canneries in local communities and their location, Dr. Chapman made the following statements:

In connection with this program of food preservation, it is essential to remember that (1) all community and county plants are publicly-owned. (2) All are operated under the direction and supervision of publicly-employed, agricultural-home economics education workers, and (3) that none of these food products preserved enter commercial trade channels (3:3).

Concerning the financing of these institutions he said:

Food plants in Georgia have, for the most part, been financed by Boards of Education (local and county) and County Commissioners. Contributions in materials and labor have been made by individuals. WPA projects and NYA

projects helped to build and equip a number of plants (3:3).

Georgia has enjoyed a long and prosperous period of service in the field of food preservation. In recalling the factors responsible for this long valuable service to farm families of his state he makes the following observations:

Looking back over the records of the last 18 years, we are able to make two very gratifying observations: First, the number of plants has increased every year since the plants were initiated. Second, the total number of units (cans and pounds) of food processed has increased every year since the beginning, and, likewise, there has been a consistent gain in the number of families served, as well as the average annual output per plant (3:4-5).

In answer to the question: "What are the factors responsible for the continuous growth and expansion of Georgia's program of community food preservation over a period of approximately eighteen years?" he listed the following factors:

1. The people like it.
2. One agency has continuously sponsored it as an integral part of its educational programs.
3. The training of managers, operators and supervisors of community food centers or plants has been provided by the institution training teachers of vocational agriculture and home economics.

These factors cannot be overemphasized by persons who attempt to develop a statewide program of food preservation through county or community food centers (3:4-5).

E. R. Alexander, Specialist in Agricultural Education (10), made a study of the Georgia and South

Carolina school-community canneries to show that the development of community canneries in these states was an outgrowth of interest on the part of agricultural educational leaders in the improvement of diet of farm families. In this study Mr. Alexander made the following remarks concerning the educational program for a successful school-community cannery:

The first step in securing a school community cannery is to develop an appreciation of a food conservation program. It is important for a teacher who wishes to establish a cannery to create an interest in this project on the part of the school board and patrons of the community. A community cannery should be the outgrowth of well-planned evening school program for both men and women in its community. The operation of the community cannery presents some problems. Such problems are more easily solved if they are known before the cannery opens for operation. Many teachers have been handicapped in the operation of a food conservation program because they have failed to determine the proper operative procedures (10-3).

According to Mr. Alexander, the second step in the Educational program in connection with the school-community cannery is:

To determine the kind and amount of food needed and to produce and process this food for farm families. The problem of providing food for farm families affords an excellent opportunity for cooperative programs carried out by teachers of vocational agriculture and home economics. The farm family is a social unit and each member should assume definite responsibilities in connection with the family food program (10:4).

In this publication, Mr. Alexander also gives a summary of 67 canneries in South Carolina and Georgia with regard to kinds of buildings used, the

different uses and sizes of buildings, ventilation, cost, and equipment. He also described the management of the plants. Finally, he discussed the development of food conservation programs and gave a floor plan of a complete cannery.

A. L. Teachey, State Director, Food Production War Training Program in North Carolina, in the publication The School Community Cannery (8) made the following suggestion in regard to the equipment that should be in a school-community cannery:

The equipment in most of the school-community canneries in North Carolina consists of:

1. Ten to 20 horse power boilers.
2. Thirty-three quart retorts.
3. One hundred fourteen quart retorts.
4. One power sealer.
5. One hand sealer.
6. One exhaust vat.
7. Four wash sinks.
8. Two preparation tables.
9. One packing table.
10. One sealing table.
11. One cooling vat.
12. One steam jacketed kettle.
13. One blanching vat.
14. One meat grinder (8:2).

Other small equipments such as knives, forks, meat saws, ladles, tongs, dish pans, and strainers were also included.

He further stated that the approximate cost including the plumbing of all this equipment is approximately \$1,200.00 (8:2).

In regard to financing a plant he made the following statement:

At the present time some financial assistance in obtaining such items as: Boilers; retorts, steam jacketed kettles; and exhaust vats may be obtained through the Food Production War Training Funds. The preparation tables, sealing tables, and packing tables, washing sinks, and other miscellaneous equipment may be purchased from local funds or some of it may be constructed in the school shop (8:2).

The Office of Distribution, War Food Administration, in its publication Community Canning Centers made the following statements in regard to establishing community plants that are being favored over the nation:

1. Community canning centers will not just happen. They must be planned and arranged well in advance of the season for their need.
2. Planning soundly and getting the center operating on business basis from the beginning is necessary if the center is to be successful over a period that justifies the expenditure of money and effort involved.
3. A community cannery must have initial funds for equipment and supplies, housing and utilities, necessary labor and supervision.
4. Such funds may be obtained through popular subscription or a bond issue in the community. Often, however, the local board of commissioners, welfare board, school board, farmers' cooperative chamber of commerce, or civic and fraternal organizations assume the initial costs. Many communities have found it advisable to incorporate the canning center on nonprofit basis.
5. Every canning center should have, if possible, a paid supervisor who is on the job all the time that the center is in operation. In large canning centers such a supervisor is essential (4:1-2).

Community Canning Centers (4).--This 99 page publication is similar to the Georgia publication (11), giving a complete treatise on every aspect of canning centers and is recommended as a reliable guide. Perhaps one of the outstanding values of this publication is the fact that it gives five complete floor plans (4: 96-99) of as many different size canneries from a very inexpensive one to a most elaborate one, such as is located on the campus of Colorado Agricultural and Mechanical College.

Clemson Agricultural College, Clemson, South Carolina, in 1940 released a publication pertaining to a study of 20 community canneries within the state (2). This publication discussed the services rendered by these community canneries, their operation, construction and equipment of the plants, and their establishment. The value of these canneries ranged from \$275 to \$5,500. This publication concluded with the following statements:

It is evident that no factor contributes as much to the success or failure of a school-community cannery as the educational program. The most disappointing finding of the twenty community canneries studied is the weakness of the educational programs relating to school-community canning (8:15).

A good publication pertaining to general welfare of Negro farm families is Negro Farm Families Can Feed Themselves (6). This publication outlines a complete program of food production and conservation. It also stresses the great importance of intimately correlating this program with the educational system, and makes the following observations:

Today, when the health and welfare of all people is so important in the life of the nation, it is especially timely that educational programs give attention to ways and means of making more adequate dietaries available to all people. The families on the farms or those who have land available for gardens and poultry, may be in a position to provide not only for their own needs but also some surplus to be sold to those who have neither facilities nor opportunity to produce their own food (6 : 3).

This bulletin gives this poem by Henry W. Grady, written to the Southern Farmer that seems to carry implication of a perfect day in the program of food production and conservation:

When every farmer in the South shall eat bread from his own field and meat from his own pastures, and disturbed by no creditor, and enslaved by no debt, shall sit amid his teeming gardens, and orchards, and vineyards, and daries, and barnyards, pitching his crops in his own wisdom, and growing them in his own independence, making cotton his clear surplus, and selling it in his own time, and his chosen market, and not at a master's bidding--getting his pay in cash and not in receipted mortgage that discharges his debts, but do not restore his freedom--then shall be breaking the fullness of our day (6 : 1).

From the literature that has been reviewed, there appears to be a strong trend to emphasize

education as a basis for organizing school-community canneries, and teachers of vocational agriculture and home economics have an opportunity for real service in helping Negro farm families to obtain better nutrition for themselves.

Chapter III

METHODS AND PROCEDURE

This study was undertaken to develop a program pertaining to the establishment, use, management, and financing of school-community canneries for Negro farm families in Mississippi.

Information was needed on the progress made by communities in establishing canneries. It was considered necessary to determine the potential need for canneries and the factors necessary for the success of the canneries.

Sources of data

Three sources of data were used. The first source was 109 Negro teachers of vocational agriculture in Mississippi. The operation of community canneries is assigned to them because of the need for welfare and training services that must be provided in carrying on these projects. These teachers meet the qualifications of the State Plan for Vocational Education and are certified by the Mississippi State Department of Vocational Education.

The second source of information was a group of four school-community canneries in Mississippi

that were rated as being outstanding in their service to the communities by the teacher training department of the Alcorn Agricultural and Mechanical College. These school-community canneries are located in Dods-ville, Greenwood, Mileston, and Alcorn, Mississippi.

The third source of information was bulletins and reports on the organization and operation of school-community canneries in Georgia, North Carolina, and South Carolina. The bulletins and reports were issued by colleges or universities of these states.

Methods of securing data

Bulletins and reports from states in which canneries were operating successfully gave pertinent information on the organization and operation of plants. They were reviewed in some detail in Chapter II of this study.

The questionnaire method was used to gather information pertaining to the establishment, operation, use, management, and financing of school-community canning plants from the Negro teachers of vocational agriculture.

In formulating the questionnaire, 1/ the writer conferred with his co-workers who were to assist him in making some evaluations. When the first

1/ See Appendix A

draft of the questionnaire was made, it was checked by the co-workers and copies of it were sent to Mr. A. P. Fatheree, State Supervisor of Vocational Agriculture of Mississippi, and to Dr. G. A. Schmidt, Professor of Agricultural Education at Colorado Agricultural and Mechanical College. Their criticisms and suggestions were incorporated into the final draft of the questionnaire.

Questionnaires were sent to 104 Negro teachers of vocational agriculture in Mississippi, and 40 completed questionnaires were returned. Data from these questionnaires were compiled on summary sheets and presented in tables covering the problems of this study.

A committee, consisting of two teachers of home economics and three members of the vocational agriculture staff of Alcorn Agricultural and Mechanical College, was organized by the writer for the purpose of visiting four successful canning plants in the state. With the aid of the questionnaire, this committee made a study of these plants, and the data gathered in this manner were compiled on summary sheets for final presentation in tables covering the problems in this study.

The findings were organized in tables for analysis and discussion and are presented in Chapter IV.

Chapter IV

FINDINGS

The information that was secured from the officers of four successful community canneries and from the questionnaires sent in by 40 teachers of vocational agriculture is presented in relation to the subordinate questions of the main problem of this study which is: What program can be recommended for the establishment, operation, use, management, and financing of school-community canning plants for the Negro farm families of Mississippi?

Most of these data were assembled in table form. Accompanying each table is a brief analysis. The divisions of the chapter are designated by underlined introductory statements.

Progress made in establishing canning plants in Negro communities of Mississippi

There are 109 departments of vocational agriculture in Negro schools of Mississippi. One hundred and five questionnaires were sent to Negro teachers of vocational agriculture while the four remaining teachers were interviewed by the writer. Forty completed questionnaires were returned, 18 schools

were reported to have established canneries while eight did not have established canneries or centers but were doing some canning in their communities. The other 14 were not attempting any canning at all, making a total of 22 of the 40 centers responding to the questionnaire as having no community canning programs, as shown in Table 1, which follows:

Table 1.--STATUS OF CANNING PROGRAMS IN
MISSISSIPPI

School No.	Location of Schools	Estab- lished Canneries	No Cannery but doing canning	No Cannery and doing no canning
1.	Alcorn	· x	·	·
2.	Bogue Chitto	· x	·	·
3.	Cleveland	· x	·	·
4.	Collins	· x	·	·
5.	Dodsville	· x	·	·
6.	Greenwood	· x	·	·
7.	Harperville	· x	·	·
8.	Hub	· x	·	·
9.	Jonestown	· x	·	·
10.	Mileston	· x	·	·
11.	Okolona	· x	·	·
12.	Pinola	· x	·	·
13.	Rose Hill	· x	·	·
14.	Sand Hill	· x	·	·
15.	Scott	· x	·	·
16.	Sumrall	· x	·	·
17.	Utica	· x	·	·
18.	Waynesboro	· x	·	·
19.	Magnolia	·	· x	·
20.	Lena	·	· x	·
21.	Philadelphia	·	· x	·
22.	Newton	·	· x	·
23.	Picken	·	· x	·
24.	McCool	·	· x	·
25.	Ackerman	·	· x	·
26.	Moorhead	·	· x	·
27.	Columbia	·	·	· x
28.	Dublin	·	·	· x
29.	Florence	·	·	· x
30.	Frias Point	·	·	· x
31.	Highlandale	·	·	· x
32.	Indianola	·	·	· x
33.	Louin	·	·	· x
34.	Magnolia	·	·	· x
35.	New Albany	·	·	· x
36.	Pinola	·	·	· x
37.	Rueville	·	·	· x
38.	Summerland	·	·	· x
39.	Sweatman	·	·	· x
40.	Tylertown	·	·	· x
TOTAL . . .		18	8	14

The size of the communities with canning programs varied from 60 to more than 700, Table 2.

Table 2.--NUMBER AND SIZE OF COMMUNITIES DOING CANNING

Farm families in community	Communities with canning facilities
700 or above	2
500 to 699	2
450 to 499	2
300 to 449	2
150 to 299	4
60 to 149	14
Total - - - -	26

Table 3 shows the progress made in the establishment of school-community canning plants for Negro farm families in Mississippi. Eighteen plants were established over a period of 10 years, the largest number established in any one year being 10, in 1944.

Table 3.--PROGRESS MADE IN ESTABLISHING COMMUNITY
CANNERIES FOR NEGRO FARMERS IN MISSISSIPPI

Year	Number of new plants
1935	1
1943	3
1944	10
1945 (4 months only)	4
Total - - - 18	

Table 4 shows that the 18 canneries varied in size and amount of equipment. The buildings varied from 168 square feet to 1,448 square feet; the average area was approximately 1,357 square feet. The cost of these buildings varied from \$300 to \$2,000, or an average of \$882.61. Table 4 also shows that the value of the equipment in these buildings ranged from \$85 to \$2,250 or an average of \$986.47 per cannery.

Types of buildings in which canneries are located

Table 5 shows some of the important physical conditions of the buildings in which canneries are located.

Table 4.--SIZE AND VALUE OF BUILDINGS: VALUE OF EQUIPMENT AND NUMBER OF PERSONS ACCOMMODATED

School No.	Floor area Sq. feet	Value of Building	Value of Equipment	Persons Accommodated
1.	1484	\$1250	\$ 950	15
2.	169	500	100	10
3.	864	1200	800	10
4.	936	1360	1100	20
5.	960	450	1500	15
6.	1830	1500	2250	20
7.	800	500		6
8.	2100	1200	2000	20
9.	576	2000	200	15
10.	720	800	1200	20
11.	1248	500	300	15
12.	3000	560	250	16
13.	600	300	85	25
14.	1352	1167	2200	28
15.	1200	1800	260	14
16.	3500	1000	2000	20
17.	1440	800	2000	20
18.	756	500	1250	12
Total	22434	\$15,887	\$16,770	351
Average	1357.44	822.61	986.47	19.5

It is of interest to note that the number of patrons who can be accommodated at one time in each cannery varies from six to 28, or an average of approximately 19.

Table 5.--TYPES OF BUILDINGS IN WHICH CANNERIES ARE LOCATED

School:	Separate Building	Type of Floor	Part of Building used for other Purposes	Type of Structure
1.	Yes	Concrete	No	Lumber
2.	No	Concrete	Yes	Lumber
3.	Yes	Wood	No	Brick
4.	Yes	Concrete	No	Lumber
5.	Yes	Concrete	No	Lumber
6.	Yes	Concrete	No	Brick
7.	Yes	Concrete	No	Lumber
8.	Yes	Concrete	No	Lumber
9.	Yes	Concrete	No	Lumber
10.	Yes	Concrete	No	Lumber
11.	Yes	Concrete	No	Lumber
12.	No	Concrete	Yes	Lumber
13.	No	Concrete	Yes	B. and tile
14.	No	Concrete	Yes	Lumber
15.	No	Concrete	Yes	Lumber
16.	Yes	Concrete	No	Lumber
17.	No	Concrete	Yes	Lumber
18.	Yes	Concrete	No	Lumber
:	:	:	:	:
:	:	:	:	:
:	:	:	:	:
:	:	:	:	:

It will be noted that most of the plants are in separate buildings constructed of lumber, brick, and brick and tile. One cannery has a wood floor; all the other buildings have concrete floors.

Essential major equipment in cannery

Table 6 shows the essential major equipment in 18 community canneries in the Negro schools of Mississippi.

Table 6.--ESSENTIAL MAJOR EQUIPMENT IN SMALL SCHOOL-COMMUNITY CANNERIES

School No.	No re-torts	No elec-tric seal-ers	No hand sealers	No scalding, blanching, washing and exhaust vats	No boil-ers
1	3	1	1	3	1
2	2				
3	3	1	2	3	1
4	3	1	2	3	1
5	3	2	1	3	1
6	1	1	1	5	1
7	1		2		
8	4	1	2	4	1
9	2		1	5	
10	3		3		
11	3	1	2	3	1
12	5	1	1	5	1
13	2	1	1		
14	1		1		
15	4	1	1	3	1
16	3		4		1
17	3	1	1	6	1
18	3	1	2	6	1
Total	50	13	29	49	12

All of the eight canneries have steam re-torts. Some have one, many have three, and one has as many as five. Twelve have electric sealers and 17 have hand sealers; two do not have hand sealers. Twelve canneries have vats for washing, blanching,

and exhausting foods for processing. There are 12 canneries that are equipped with steam boilers for furnishing steam for processing.

Arrangement of equipment in cannery

A summary of responses to question A in the questionnaire asking how equipment should be arranged in the order of its progressional use in the cannery reveals the sequence to be as follows: preparing, filling, exhausting, sealing, and cooling.

This sequence of canning operations provides a guide for the arrangement and installation of essential major equipment in school-community canneries. The floor plan of a typical small community cannery for Negro farm families as suggested by the Georgia State Board for Vocational Education (11:7-8) was checked against the sequence given above and found to be satisfactory. This floor plan is shown in Figure 1.

Table 7 shows that one-third of the families in these communities were making use of the canning centers.

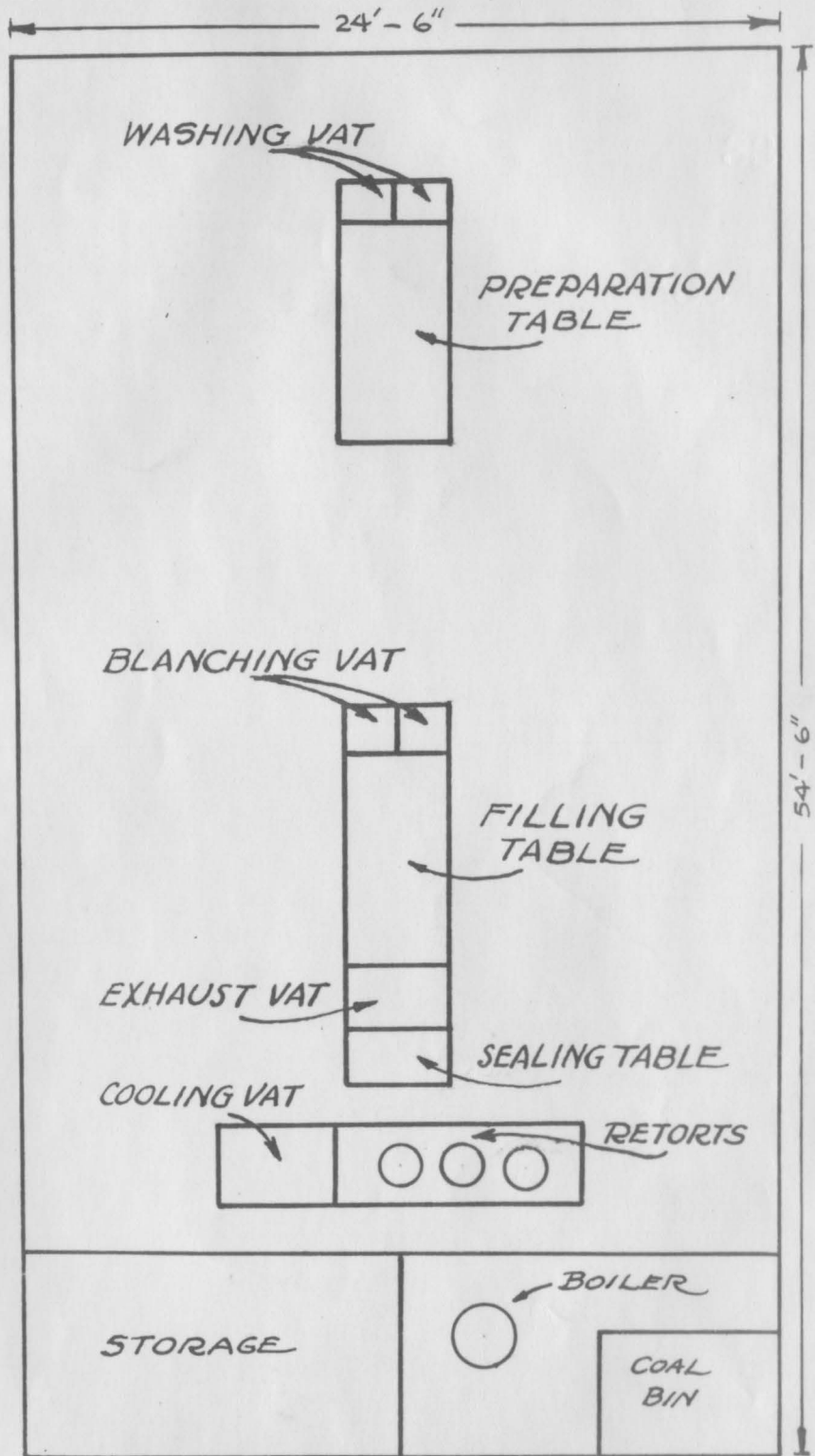


FIG.1 ARRANGEMENT OF EQUIPMENT
FOR SCHOOL COMMUNITY CANNERIES

Table 7.--EXTENT OF CANNING ACTIVITIES DURING 1944

Schools	Farm families in school area	No. families using cannery	Total canned in 1944
1	125		
2	2000	356	5,262
3	100		
4	84		
5	80	50	4,800
6	214	116	3,300
7	150		
8	60	54	9,876
9	69		
10	207	36	2,879
11	107	73	10,000
12	60	60	1,100
13	160		
14	2100	75	26,000
15	75	50	600
16	132	90	5,000
17	100		
18	400	60	1,500
19	100	40	10,000
20	60	37	1,360
21	450	200	280
22	85	10	2,917
23	143	70	1,000
24	647	383	88,504
25	400	150	8,000
26	500	260	10,000
Total - -	8,608	2,440	205,728
Average	315.2	117.8*	10,826*

*These columns are divided by 19, the number of schools doing canning in 1944.

The questionnaires received from teachers in the schools numbered 26 through 40 but gave no information on the extent of canning activities in

those communities during 1944.

Table 7 shows that there are approximately 8,600 families to be served, or an average of approximately 315 families per community; that approximately 2,400 of these families were served, or an average of approximately 117 families; and that approximately 205,000 cans of produce were processed, or an average of approximately 10,000 cans per community.

Table 8 shows the schedule of operations that were followed by the 18 school community canneries throughout the year.

Table 8.--OPERATING SCHEDULE OF COMMUNITY CANNERY

School	SUMMER SEASON May to Nov.		WINTER SEASON Dec. to April	
	Days per week	Hours per day	Days per week	Hours per day
1	4	5	2	5
2	3	3	2	8
3	3	8	1	10
4	4	10	2	10
5	3	10	1	10
6	3	10	1	7
7	3	4	2	6
8	3	8	2	8
9	4	14	2	10
10	5	8	3	8
11	3	10	2	8
12	2	4	1	8
13	3	10	2	10
14	4	8	3	8
15	4	7	3	7
16	5	5	2	6
17	2	6	1	8
18	2	3	1	3
Total . . .	58	133	33	127
Average . .	3.22	7.5	1.22	7.11

The summer season is from May through November inclusive, and the winter season is from December through April, inclusive. The canneries were in operation an average of seven and one-half hours per day, three days per week, during the summer season. In the winter the average length of the day is seven hours and the canneries are operated an average of one

day per week.

Factors determining success of canneries

The factors that determine the successful operation of a school-community cannery as reported by Chapman, Clemson College, Alexander, Teachy, and the committee of vocational agriculture and home economics instructors, are given in Table 9.

Table 9.--COMPARATIVE AGREEMENT ON SUCCESS FACTORS IN OPERATING SCHOOL-COMMUNITY CANNERIES

Success factors	Chapman Chapter II page	Clemson College Chapter II page	Alexander Chapter II page	Teachey Chapter II page	As determined by Committee	Frequency
1. Work must be part of an educational program pertaining to nutrition, pro- duction and processing of food.	: : : : x : :	: : : : x : :	: : : : x : :	: : : : x : :	: : : : x : :	: : : : 5 : :
2. Public schools should sponsor program con- tinuously.	: : : : x : :	: : : : x : :	: : : : x : :	: : : : x : :	: : : : x : :	: : : : 5 : :
3. Operated year round.	: : : : x : :	: : : : x : :	: : : : x : :	: : : : x : :	: : : : x : :	: : : : 5 : :
4. Vocational agri- culture teachers should supervise the program.	: : : : x : :	: : : : x : :	: : : : x : :	: : : : 0 : :	: : : : x : :	: : : : 4 : :

Continued

Table 9.--COMPARATIVE AGREEMENT ON SUCCESS FACTORS IN OPERATING SCHOOL-COMMUNITY
CANNERIES.- Continued

Success factors	Chapman Chapter II page	Clemson College Chapter II page	Alexander Chapter II page	Teachey Chapter II page	As determined by Committee	Frequency
5. People should like them.	: : : x	: : : 0	: : : 0	: : : 0	: : : x	: : : 2
6. Cost kept as low as possible.	: : : 0	: : : 0	: : : 0	: : : 0	: : : x	: : : 1
0 Not mentioned	: : : :	: : : :	: : : :	: : : :	: : : :	: : : :

Table 9 reveals the relative emphasis given each of the six factors. Factors 1, 2, and 3 have a frequency of 5 while factor 6 has a frequency of only 1.

How plants are financed

In Table 10 are given the various means of financing school-community canning plants in the Negro schools of Mississippi and the number of canneries using each.

Table 10.--SOURCES OF FINANCE

Source	Canneries using source
War training funds and local district	14
War training funds and farmers' co-ops	1
War training funds and school district	1
War training funds and county public funds	1
War training funds and Delta Pine Land Co.	1
Total - - - - -	18

Table 10 shows that the principal financial assistance for the operation of canning centers was received from War Food Production Training Funds. Financial assistance was also received from one local

school district, from a farmers' cooperative, from one plantation owner and from the office of a county superintendent of schools.

All the findings that have been presented in this chapter are discussed in Chapter V.

Chapter V

DISCUSSION

This study was made for three reasons:

1. Because of the importance of having adequate supplies of food to insure the health of the people.
2. Because of the present trend toward the production and conservation of food.
3. Because it is believed that out of it would come some worth-while suggestions to the Negro teachers of vocational agriculture which would aid them in developing programs of food production and conservation.

Status of school-community canneries

From the data presented in this study, it was found that considerable progress has been made in establishing school-community canneries. Table 1 page 27 , reveals that the 40 questionnaires were received from teachers in cities that are located in all parts of the state. It is of further interest to note that the 18 canneries now in operation are located in schools that are rather well distributed over the state as a whole. Data received from eight of the teachers

indicated the interest of their communities in carrying on canning even though they do not have established canneries. In 14 cities, numbers 27 through 40, Table 1 page 27 , the teachers responded to the request for information even though they reported no canneries and no organized canning activities.

The reports from Georgia (11:5), North Carolina (8), and South Carolina (2) show that having food preserving centers easily available was a very important factor in maintaining the economic stability of the rural population and in raising their general standards of health.

A wide variation was noted in the sizes of the communities having established canneries or those doing canning without established canneries. Table 2 page 28, shows that communities range in size from 60 families to 700 families or more. The progress made thus far in the establishing of school-community canneries among the Negro farm families of Mississippi is revealed in Table 3, page 29 . The largest number established in any single year is 10 for 1944. This may be attributable to the emphasis being placed on food production and preservation nationally, as brought on by the impact of the war, and the financial help given by the War Food Administration.

The interest already manifested by Negro communities in Mississippi, the progress that has been

made in establishing canneries and the benefits of canning programs, as reported by states having them, lead to the recommendation that this movement should be promoted in the state of Mississippi among the Negro farm families.

Building

An economic factor worthy of consideration is the type of buildings in which the canneries are housed. This is shown in Table 4 page 30 . Twelve of the canneries were in buildings used only for canning while six were housed in buildings used for other purposes also. There seemed to exist no objections of using the cannery to house certain other school activities such as the school lunch program.

It is further shown in Table 4 page 30 , that 15 of the buildings were constructed of lumber, two were constructed of brick and one of brick and tile. The floor of only one cannery was made of wood while the others are made of concrete. For cost reasons it is obvious that lumber is the most desirable building material and from similar considerations it is obvious that concrete floors are most desirable.

Table 5, page 31, shows that the 18 canneries established in Mississippi varied in floor space from 169 square feet to 1,484 square feet, with an average floor area of 1,357 square feet. These buildings

varied in cost from \$300 to \$2,000, with an average cost of \$882.61 per building and accommodated at one time an average of approximately 20 people who were canning produce. This cost compares very favorably with a study conducted by the University of North Carolina (8) from which it was found that the average cost of buildings was \$1,250.

Table 7 page 35 , shows that there are 315 families in the average school community (11) in Mississippi. In Georgia, Wheeler and Duncan found that a one-unit cannery with an approximate floor space of 30 feet by 45 feet will accommodate from 100 to 400 families. Based upon the findings of Wheeler and Duncan and upon the findings in this study, it is recommended that in the construction of a new cannery, the size of the floor should be 30 feet by 45 feet so that it will accommodate approximately 100 to 400 families. It is further recommended that the building be planned so that the cost of construction will be approximately \$900.

Essential major equipment

The question now arises as to what items of equipment are most essential for the successful operation of a cannery. In Table 6, page 32 , is shown the essential equipment found in the 18 school-community canneries established in Mississippi. The

items of equipment in these 18 canneries include 50 retorts, 14 electric sealers, 29 hand sealers, 52 scalding, blanching, washing, and exhausting vats, and 12 boilers.

Information from the South Carolina Agricultural Education Bulletin Number 8 (5:4) is helpful in determining the amount of equipment needed in a cannery. Their recommendation is that the most essential items of equipment for a small school-community cannery are: three retorts, four vats, one hand and one electric sealer, and one boiler.

Table 5 page 31, shows that the cost of equipment in the 18 canneries that were studied varied from \$85 to \$2,250. This is an average cost of approximately \$986. The purchase of a new or of a second-hand boiler and also of a new or used electric sealer, the two most expensive items of equipment, would materially affect costs. Then, too, charges for making the vats vary in different communities.

It is recommended that the standard items of major equipment for a small school-community cannery include three retorts, four vats, one hand and one electric sealer, and one boiler.

According to Wheeler and Duncan (11:74) there are two general arrangements of equipment in community canneries in Georgia. One arrangement carries the patron along work tables which are placed lengthwise of the canneries toward the exhaust vats and retorts

which are situated beyond the end of the tables where the sealing is done. Most of the earlier plants in Georgia were arranged in this manner and are ideal for small community canneries. The other arrangement in community canning plants in Georgia placed the work tables crosswise of the cannery with the retorts along the opposite side or at one end of the canning room. This arrangement is excellent for large canneries and is common in them.

According to data gathered in this study on the arrangement of equipment in a small community cannery it was found that the equipment should be placed for progressional use, see drawing on page 34 . The sequence was found to be as follows: preparing, filling, exhausting, sealing and cooling.

Since the floor plan shown on page 34 has an arrangement of equipment that makes the foregoing sequence possible and agrees with the report from Georgia, it is recommended that the arrangement of equipment shown in the sketch on page 34 be followed in installing equipment in new community canneries.

Operation and use

For the full utilization of facilities in school-community canneries it would appear feasible that the services be governed by an organized daily schedule. According to data revealed in Table 8, page 37, the

maximum days per week that a cannery operated varied from two to five in summer to one to three in winter, the average for the summer being approximately three days and for the winter one day. The number of hours per day varied from three to 14 during the summer to five and 10 hours per day in the winter, the average hours in the summer being 7.5 and in the winter, 7.11.

During the time that these canneries were in operation considerable food was processed and preserved for use by Negro families. Table 7, page 35, shows that 2,440 families used the 18 canneries in processing 205,228 cans of food during 1944. This was done even though four of the canneries were established late in the year. On the average 117 families made use of each cannery, and an average of 10,826 cans was processed in each community.

The Office of Distribution, in its bulletin on Community Canning Centers (4:4), gives the following information on the daily capacities for canneries.

To estimate roughly the daily capacity of the unit and consequently the amount of equipment needed; divide the total number of cans to be processed by the approximate number of days the cannery will operate. Then add from 10 to 15 per cent to allow for the peak production period when the greatest amount and variety of food can be expected.

The data presented above have important implications. First, although canneries are finding a place in the communities of Negro farm families of

Mississippi, an analysis of the detailed data reveals the inadequacy of canning facilities. Secondly, these data, together with those presented in Chapter II, page 12, point unmistakably to the value of increased food production and preservation. On the basis of the rule given above, it is clear that there are more farm families in the school areas than present canning facilities can accommodate. It is therefore apparent that there is a need for a program of education covering this subject with Negro farm families in Mississippi.

It is recommended that the teachers of vocational agriculture include in their courses of study instruction in the utilization of the canneries, including planning, production, and conservation of food for family use. The purpose of this type of instruction would be two-fold. The first purpose would be to acquaint young adults with the advantages and methods of food production and canning; and the second would be to stimulate their parents to make more complete use of canning facilities and thereby help themselves financially as well as from the standpoint of improving health standards.

Success factors

A number of factors contributing to the successful operation of school-community canneries are pointed out in Table 9, page 39, by five authoritative

sources. These sources are in complete agreement that the following factors are essential: (1) The work must be a part of the educational program pertaining to nutrition, production, and processing of food. (2) Public schools should sponsor the program continuously. (3) The program should be operated the year round.

The fourth success factor, that vocational agriculture teachers should supervise the program, was rated as essential by four of the five authoritative sources. Table 9 shows that factor five, people should like the canneries, and factor six, the cost should be kept as low as possible, were rated as essential by only two and one of the sources, respectively and have, therefore, been dropped from further consideration.

Chapman (3:4-5) reviewed in Chapter II, in answer to the question, "What are the factors responsible for the continuous growth and expansion of Georgia's program of community food preservation over a period of approximately 18 years?", states, as one of these factors, that, "one agency has continuously sponsored it as an integral part of its educational programs."

Chapman again points out another factor that has contributed to the success of the school-community canning program in Georgia. He revealed the facts that all community and county canning plants are publicly

owned and that all are operated under the direction and supervision of publicly-employed agricultural and home economic education workers. In consideration of the success that has been achieved in Georgia in the development of over 500 school-community canning plants, it would seem imperative that the public schools should sponsor the school-community canneries for the use of farm families of Mississippi.

Since it has been shown that the direction and supervision of the school-community canneries should be a responsibility of the vocational agriculture and home economics teachers, the training and qualifications of these teachers to do this job effectively raises a point worthy of consideration. It is stated by Chapman (3) that the training of managers, operators, and supervisors of community food centers or plants in Georgia has been provided by the institution's training teachers of vocational agriculture and home economics.

Therefore, it is recommended that the following success factors be used as a guide for planning, establishing, and operating subsequent canning programs for Negro farm families in Mississippi.

1. That the work be a part of the educational program pertaining to nutrition, production, and processing of foods.

2. That the public schools sponsor the program continuously.
3. That the canning program operate the year round.
4. That the vocational agriculture teachers supervise the programs and that the Alcorn Agricultural and Mechanical College assume the responsibility for training vocational agriculture teachers in the necessary sciences and techniques for efficient canning plant management.

Financing community canneries

Table 10, page 41 , reveals the principal sources of revenue for establishing and operating the school-community canneries in Mississippi. One feature about this table is of particular significance, that funds from the War Food Administration through its war training program were used to finance each cannery in cooperation with some local agency or agencies. With the end of the war swiftly approaching, a reality, it is reasonable to anticipate a curtailment in funds from this source and a probable complete cancellation of such funds at the close of the war. In view of these possibilities, therefore, it behooves the school people responsible for the promotion and development of the canning programs to look well into the financing of these canning plants, and so adjust the means that

a larger proportion of local assistance may be obtained in order to attain the desired goal.

Table 10, page 41 , reveals the use of various methods to secure funds. Some teachers were able to get the cooperation of the local boards while one was able to get his county superintendent to assist with public school funds of the county. Another teacher financed the establishment of his plant through assistance from the Farmers' Co-operative Association.

Financing a canning program has been the subject of considerable study. Miscellaneous Publication number 544 of the War Food Administration (4:2) makes the following statements regarding the financing of community canneries:

A community cannery must have initial funds for equipment and supplies, housing and utilities, necessary labor and supervision and protective insurance for workers. Such funds may be obtained through popular subscription or bond issue in the community. Often, however, the local board of commissioners, welfare board, school board, farmers' co-operative, chamber of commerce, or civic and fraternal organizations assume these initial costs. Many communities have found it advisable to incorporate the canning center on a non profit basis.

Other sources of support for the community cannery are contributions by civic-minded individuals or groups. In some states, legislatures have appropriated funds to assist in establishing and operating food preservation centers. Communities should investigate all possibilities for financial assistance. They will find helpful information on available government aid from the state agricultural extension service or the state department for vocational education.

It seems evident that the program of financing school-community canneries is a joint responsibility of the teacher of vocational agriculture and interested groups in the community. There appear to be numerous sources for financing school-community canneries, the chief obstacles being lack of information and cooperation.

It is recommended that interest in a school-community cannery on the part of local patrons be developed through discussions of its importance and usefulness in evening classes and group meetings. This should lead to the organization of a local committee that will devise some plan of action for securing the necessary funds for a community cannery.

Recommendations

On the basis of this discussion and the relation of the data it revealed to the major and subordinate problems of the study, the following recommendations are made:

1. That the school-community cannery movement be promoted in the State of Mississippi.
2. That new canneries be frame structures 30 feet by 45 feet with concrete floors.
3. That the standard items of equipment for the small school-community cannery should include one boiler, three retorts, four vats, one hand

and one electric sealer.

4. That the arrangement of equipment provide for progressional sequence of operation to be performed in canning foodstuffs.

5. That a unit of instruction pertaining to planning, production, and conservation of food for family use be included in the courses in vocational agriculture and home economics.

6. That the following success factors be used as a guide for planning, establishing, and operating canning programs. They are: (a) the canning activities should be a part of the educational program; (b) public schools should sponsor the program continuously; (c) canneries should operate the year around; and (d) the vocational agricultural teacher should supervise the program and be trained in the necessary science and techniques by the Alcorn Agricultural and Mechanical College.

7. That interest in a school-community cannery on the part of local patrons be developed through discussions of its importance and usefulness in evening classes and group meetings.

8. That local communities be organized to devise plans for securing the necessary funds for establishment and operation of a community cannery.

The adoption of the foregoing recommendations should provide the Negro communities in Mississippi with a program for the establishment, use, operation, management, and financing of school-community canneries.

Chapter VI

SUMMARY

A large proportion of the population of Mississippi consists of Negroes who are in the low income group and whose health standards are low because of poor diets. Ninety per cent of these people live on farms and depend on farming for their living.

In 1926 the school-community cannery movement was started in Georgia for the purpose of helping to improve economic and health standards among people in low income groups. By 1945 more than 500 school-community canneries had been established in Georgia. This example was followed in North Carolina, South Carolina, and California.

Need for study

In 1931 the first community cannery was established in Mississippi for the use of Negro farm families. Since that time 18 canneries have been established and are now in operation. The program, however, has been limited and in order to extend its benefits the present investigation has been undertaken. The specific problem of this study is: What Program Can Be Recommended for the Establishment, Use,

Operation, Management and Financing of School-Community Canneries for Negro Farm Families in Mississippi?

Methods and procedure

Three sources of data were used. The first was 105 certified teachers of vocational agriculture who were held responsible for community canning programs in Mississippi. The second source was four community canneries whose programs were rated as being outstanding by the Alcorn Agricultural and Mechanical College. The third source was pertinent research reports on community canning projects in other states.

Three methods were used in gathering data. The questionnaire method was used to gather information from teachers of vocational agriculture. Directed visitation was the method used to gather information from the four outstanding canning centers. Reviews were made of research reports on community canning programs.

The data were summarized and presented in tables for analysis and discussion.

Findings

1. Forty teachers responded to the questionnaires. Eighteen reported established canneries, eight reported doing some canning but not having organized community centers, and 14 reported no canning activities or establishments.

2. Communities with established canneries varied in size from 60 to more than 700 families.

3. Twelve of the canneries were housed in buildings used exclusively for this purpose while six were in buildings used for additional purposes.

4. One cannery was established in 1935, three in 1943, 10 in 1944, and four in the first four months of 1945.

5. The average floor area of the 18 canneries was 1,357 square feet and would accommodate 19 people working at the same time.

6. The cost of the essential equipment for the average cannery was \$986.00.

7. There were 6,608 farm families in the areas doing canning but only 2,440 were being reached by the services of these plants.

8. The canneries operated an average of 7.5 hours per day, three days per week in summer, and seven hours per day, one day per week in winter.

9. The essential major equipment consisted of: vats for washing, blanching, and exhausting; preparation, filling, and sealing tables; one electric sealer; hand sealers; retorts; and steam boilers.

10. Equipment was usually arranged in progressional order of canning operations.

11. Fourteen of the 18 established canneries were financed almost wholly through the War Production Training Fund.

Recommendation

An analysis of the findings together with data contained in Chapter II resulted in the following recommendations:

1. That the school-community cannery movement be promoted in Mississippi.

2. That new canneries be frame structures 30 feet by 45 feet with concrete floors equipped with one boiler, three retorts, four vats, one hand sealer, and one electric sealer arranged for production sequence.

3. That a unit of instruction covering food conservation be included in the courses in vocational agriculture and home economics.

4. That the following success factors be used as a guide for planning, establishing, and operating canning programs: (a) the canning activities should be a part of the educational program, (b) public schools should sponsor the program continuously, (c) canneries should operate the year round, and (d) vocational agricultural teachers should supervise the programs and be trained in the necessary sciences

and techniques by the Alcorn Agricultural and Mechanical College.

5. That interest in a school-community cannery be developed through discussions of its importance and usefulness in every class and group meeting.

6. That local committees be organized to devise plans for securing necessary funds for establishing and operating a community cannery.

The adoption of the foregoing recommendations should provide the Negro communities in Mississippi with a program for the establishment, use, operation, management, and financing of school-community canneries.

APPENDIX

	Page
A. A Questionnaire	64

Appendix A

A QUESTIONNAIRE

Name _____

Address _____

Name of Institution _____

Please answer questions by inserting the information opposite questions:

A.

Establishment

Year cannery established _____, Size of building _____

Kind of material used in construction; Lumber _____

Brick _____, Concrete blocks _____ Native stone _____

Poles _____ Other material _____

Kind of floor; Concrete _____ Wood _____ Dirt _____ Other _____

Value of building _____

No. and size of retorts _____, _____, _____

No. of washing vats _____ No. of blanching vats _____

Do you have an exhaust box _____?

No. of electric sealers _____ No. hand sealers _____

Size of boiler (H.P.) _____ Is cooling vat available? _____

Value of equipment _____

Is your cannery building used for any other purpose? _____

Yes _____ No. If yes, for what _____

Check the arrangement of your _____

equipment in order of your working arrangement: (1) _____

(2) _____ (3) _____ (4) _____

(5) _____ (6) _____ (7) _____

(8) _____

B.

Operation

Is an operator available on canning days? _____

No. of days per week cannery operates during summer _____

No. of days per week cannery operates during winter _____

No. of hours agriculture teacher spends at cannery _____

on canning days _____ General duties of agriculture _____

teacher at cannery _____

How many people can comfortably work in cannery? _____

A QUESTIONNAIRE (Cont.)

Do you hold any classes in connection with your canning program? _____

What are some of the problems discussed? _____

Check source or sources of your canning information:

U.S. D.A. Bulletins _____ Georgia Bulletins _____
South Carolina Bulletins _____ Mississippi Bulletins _____

Can the cannery operate without the Agriculture Teacher? _____ Are patrons able to can with little or no help after using the cannery for one season? _____

C.

Use

Approximate number of farm families in school area _____

Number of families using cannery in 1944 _____

Number of cans processed in 1944: Vegetables _____

Fruits _____ Meats _____ Total _____ (No.3).

Did more families use cannery in 1944 than ever before? _____

If so, what factors contributed most to the increase in use of the cannery? _____

Could your farm families have preserved their vegetables, fruits, and meats through any other means if your cannery had not been available? _____

Are all-day boys taught the production and conservation of food for the farm families? _____

Are all-day boys taught to use and operate the cannery? _____

Does the operation of the cannery in summer present any problems in supervision of all-day classes? _____

Do all families of all-day boys use the cannery? _____

D.

Management

Check one of these that serves as sponsoring agency for your cannery: Dept.Voc.Agr. _____ Dept.Home Ec. _____

P.T.A. _____ N.F.A. _____ Others _____

Who serves as supervisor of cannery _____

Has supervisor had any training _____

In what course, or courses _____

Where _____

Are there any records kept of canning done in the plant? _____

A QUESTIONNAIRE (Cont.)

Check the source of your cans for use in plant:

Local merchant _____ Bought by plant _____
 Farmers purchase own cans _____

E.

Finance

Please check source from which finance was secured for establishing cannery: Gov. agency and local community _____

Gov. agency and local school and adjourning schools _____ School only _____

War Production fund, State Board for Voc. Agri. and community _____ Gov. agency only _____

School district Board of trustees _____

Local Board of trustees _____ Private contributions _____

Gov. agency and N.F.A. _____ What was the aid in form of:

Money _____ Material for building _____ equipment _____

How much do you charge as canning fee above the cost of cans? _____

What fuel charges are made? _____

Is cannery operated without cost to school? _____

BIBLIOGRAPHY

1. Cannery workshops handbook. Raleigh, N.C. State board for vocational education, (1944) 49 p. (Its special bulletin 23).
2. Canning program as carried on in twenty community canneries in South Carolina (Clemson, S.C., Clemson agricultural college, 1940) 15 p. mimeographed.
3. Chapman, Paul W. Georgia's experience in community food preservation. (Washington, U.S. Department of agriculture 1944). 15 p. Mimeographed, (2572-15) Address (given at the Food preservation workshop training conference, Peoria, Illinois, January 17, 1944.
4. Community canning centers, (Washington U.S. Gov't Print. office, 1944) 99 p. (U.S. Department of agriculture, Miscellaneous publication, No. 544) Issued by the distribution office, War food administration.
5. Community school canning in South Carolina, Clemson S.C., Department of agricultural education, School of vocational education, Clemson agricultural college (1942). 12 p. (Its agricultural education bulletin for teachers of vocational agriculture, no.8.)
6. Negro farm families can feed themselves. Washington, U.S. Gov't printing office, 1942 (53)p. (U.S. Office of education. Vocational division Leaflet no.8.)
7. Negro farmers in wartime food production. (Washington, U.S. Gov't print. off., 1944) 13 p. (U.S. Dept. of agriculture. The farmers and the war, 6.)

8. The school-community cannery. Raleigh, N.C., State board for vocational education, (1943) 29 p. Mimeographed. (Its Special bulletin 22.)
9. Stiebling, Hazel K. Are we well fed? (Washington D.C., U.S.Govt. print. off., 1941.) 28 p. U.S. Department of agriculture. Miscellaneous publication no. 430.)
10. The use of community cannery in the production, conservation and processing of food for farm families. Washington, U.S. Office of education, 1943. 19 p. Mimeographed. (U.S. office of education. Vocational training for war production workers Course 15; Misc. 2656.)
11. Wheeler, John T. and Duncan, A.D. Establishing, operating and using school community canning plants. (Athens, Georgia, University of Georgia press, 1943) 78 p. (Georgia. State board for vocational education. Special bulletin, 11.) (The rural war production training program. Course 15.

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