Preliminary Summary of Extension Work in South Carolina in 1938

The Extension Service in South Carolina entered the year 1938 with a definite program of agricultural extension work, which had been developed in cooperation with the farm leadership of the state in a series of county and community meetings held during the Fall of 1937.

In these county and community conferences, which were held in each county of the state, representative farmers and farm women were brought to participate in a full discussion of the problems affecting the agriculture and home life of the farm people in the county, and in the communities which they represented. Factual data was presented at these conferences by county and home demonstration agents, district agents, and in some cases by subject matter specialists. Upon the basis of their knowledge of actual conditions, backed up by the basic agricultural, economic, and social data, the farm people, at these conferences, in subcommittee meetings, and individually and collectively throughout the year, gave invaluable service in developing the farm and home programs of their counties and communities. As a result of this procedure, the farm people feel a closer relationship to agricultural planning than before, and also an increased responsibility in the conduct of the program. Very gratifying results in the development of farmer leadership are also noted.

Some interference in the conduct of the extension program as planned was occasioned by the compulsory A. A. A. cotton and tobacco adjustment programs, which called for drastic re-adjustments from the 1936 and 1937 voluntary A. A. A. programs. In order that these changes and adjustments might be made with the greatest degree of equity and fairness to all farmers, the county agents gave much of their time and efforts to the A. A. A. program throughout the year. Particularly was this true in the tobacco counties in the Pee Dee section of the
state, where this program caused much unrest and dissatisfaction among the growers of flue-cured tobacco.

In agricultural economics and farm management work, stress has again been placed upon complete farm records. The 1937 records have been analyzed during the year by the farm management division, and the results made available to extension workers and farmers. Enterprise demonstration records have, as in the past, served as the basic demonstration work of the extension service. These records developed by the subject matter specialists in cooperation with the division of agricultural economics have been kept by farmers in every county of the state on all important farming enterprises, for from one to twelve years, and the results annually summarized and interpreted by this division. In several instances, as in the case of cotton, poultry, tobacco, corn, dairying, livestock, etc., these records stand as reliable, accurate information and material for educational work.

A feature of the agricultural engineering program for 1938 has been a series of farmer-dinner meetings held throughout the state, and designed to improve the handling and ginning of the cotton crop. These meetings have been well attended, and great interest has been shown. Rural electrification work has consisted of schools, demonstrations of electrical equipment, and organizational work to aid farmers in obtaining electric current in communities, and on a county and area basis. A complete farm buildings plan service is nearing the stage where plans for all farm buildings can be furnished to farmers. Soil conservation work has been advanced through 21 voluntary county soil conservation associations of farmers, four soil conservation districts, and in cooperation with the soil conservation service.

Agronomy work has featured the cotton and tobacco enterprise record demonstrations showing the economical production of high yields of quality cotton and tobacco. The educational effect of these demonstrations continues to serve to
maintain the high quality of cotton and tobacco produced on South Carolina farms. Progress has also been made through demonstration work with small grains, cover crops, and pastures.

The enrollment in boys' 4-H clubs has been maintained, and agents have given an increased amount of time and effort to the advancement of the older youth program.

Dairy Herd Improvement work has been given the emphasis in the 1938 dairy program of the extension service. The results from this work become of greater value each month to the dairymen of the state, and are being effectively used by the agents and dairy specialists. The use of purebred dairy bulls, the care and management of the family cow, the proper care and handling of milk and milk products, the use of milk in the home, and the production of hay and pastures have also occupied important places in the extension dairy program for 1938.

One of the outstanding projects in entomology and plant pathology has been the treatment of cotton planting seed with mercury dust to control seed-borne diseases. Educational work in this connection in 1936 and 1937 resulted in an estimated one-third of the 1938 cotton acreage in the state being planted with treated seed. Demonstrations of the chemical treatment of sapwood fence posts by methods within the reach of every farmer have met with an enthusiastic reception from farmers throughout the state, who see therein a possibility to build fences that will last at a reasonable cost. Very definite results have been obtained from boll-weevil control demonstrations, and indications are that a much larger proportion of the 1939 crop will be poisoned than has been the case for a number of years past.

Forestry extension work has been re-established in South Carolina after a lapse of ten years. Much interest in forestry has been occasioned by the establishment of several paper and pulp mills in the state, and by the work of other governmental agencies in connection with their programs. This project is set up to reach the farmers of the state through the county agents and aid them in the production,
marketing and uses of farm timber.

Extension work with livestock has been mainly performed in connection with hogs, beef cattle and sheep. Swine sanitation demonstrations have been conducted in practically all the swine producing counties, with marked results. Hog feeding demonstrations still furnish the basis for the program for the production of quality hogs for market. Stress has been placed on the use of purebred sires, and the quality of the livestock produced in the state continues to steadily improve.

The horticultural program has continued to be of great value to the commercial peach, apple, and truck growers of the state. As a result of work with commercial peach growers, South Carolina continues to maintain an enviable position with reference to other peach producing states in the matter of yields and quality. Work to re-establish sweet potato production as an additional source of income on South Carolina farms is meeting with very definite and tangible results, reaching the position in 1938 where the farmers have formed their own organization to promote the production and marketing of this crop. Some progress has been made in the matter of home gardens, but little gain is noted in the home orchard work.

The marketing program has stressed improved grading and packing of farm products, especially truck and fruits. Improved machinery is being adopted throughout the state for this purpose, and growers are taking the matter seriously. The marketing of poultry and hogs has made steady gains, and the supervision of Federal-State shipping point inspection work and the marketing agreements, and the organization of farmer-cooperatives has advanced satisfactorily.

The poultry program has stressed demonstration flock records as the basis for the improvement of farm poultry flocks. The National Poultry Improvement Plan is growing in favor with the farmers of the state, and Record of Production work
is making definite gains. An almost phenomenal increase in turkey production is noted in a number of counties where demonstration work with turkeys has been conducted.

An effort has been made to bring out needed extension publications in all lines of work, and, at present, the results approach a satisfactory status.

The visual instruction program has included the production and use of educational motion picture films and film strips on agricultural and closely related subjects. These films and film strips will be shown to over 50,000 farm people during 1939.

Looking Toward 1939

One of the goals for the extension service in South Carolina for 1939 will be the improvement of the office organization handling the A. A. A. program in the offices of the county agents; this in order that the agents may further separate themselves from the responsibility for the mechanics of this program, and devote more of their time and energies to educational work pertaining to both the agriculture of their counties, and the A. A. A. and other governmental programs in their counties.

Land-use planning work will be furthered in 1939. Preliminary plans for this work are now being rounded out in preparation for the new year's work.

The extension service plans to renew the live-at-home program in 1939, with especial stress upon the most economical and profitable use of lands diverted from cotton and other crops, and the use of these lands for the production of food, feed, and additional sources of income.

The basis of the program for 1939, as in the past, will be complete farm records and enterprise demonstration records, the results to be used to further teach farmers to balance their farming systems and economically produce high quality crops and livestock.
THE CLEMSON COLLEGE EXTENSION SERVICE

A Brief Summary of Some of Its Activities and Results for 1938

by

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FOREWORD

D. W. Watkins
Director

Agriculture is undergoing rapid changes in an effort to adapt itself to today's domestic and world commerce. The Extension Service, a branch of Clemson College cooperating with the United States Department of Agriculture, is engaged full time in aiding farmers to meet the situations that arise and to make adjustments to changing conditions. Emphasis is put on the practical development of every possible source of farm income.

A development in Extension work in recent years has been the increase in the number of assistant county agents. This increase represents an effort to meet demands made by farm people on the county agent's office and to afford guidance in the making of farm adjustments. This aid to agriculture is essential for two reasons: First, Farm adjustments are necessary due to national policies and world conditions. Second, Competition for the markets that exist requires that those who would supply these markets make themselves expert in the details of handling new crops for income.

The amount requested for extension work for the year beginning July 1, 1939 is $166,000.00. This is the amount that was made available for this work in the 1938 state appropriations.

Many citizens are familiar with some of the activities of the Extension Service in the different counties. Few have occasion to learn of the full scope of extension work and its relation to farm life. On the following pages some extension activities are outlined so as to give an idea of this scope and relation.
The extension program of agricultural demonstration work is developed
in cooperation with the farm people themselves. Forty-six county
agricultural program planning committees, one in each county of the
State, made up a total of 1017 representative farmers and farm women,
meet from time to time with the county agents, home demonstration
agents, and other extension workers for the purpose of planning the
agricultural program for their respective counties and to assist in
the conduct of the program. All extension work is conducted in close
cooporation with these committees of farm people.

In addition to these county program planning committees, the exten-
sion service cooperates with the following listed organizations and
agencies in developing and carrying out the agricultural program for
the State.

County Councils of Farm Women (46). (Also community district and
state groups of farm women.)

County Agricultural Conservation Committees (46) administering A.A.A.
(Also Community committees).

State Agricultural Conservation Committee (A.A.A.)

County Soil Conservation Associations (21) in cooperation with Federal
Soil Conservation Service and County Legislative Delegations.

Soil Conservation Districts Supervisors

4-H Clubs, and Adult local leaders of 4-H clubs

State Dairy Cattle Breeders Associations - Guernsey & Jersey

Dairy Herd Improvement Associations

Cooperative Milk Producers Associations

County Dairymen's Associations

Swine Breeders Associations

Hatcherymen's Associations

State Poultry Council

S. C. Poultry, Pigeon and Rabbit Breeders Association

County Poultry Associations

Beekeepers Associations

Cooperative Marketing groups handling poultry, hogs, fruits, vegetables
and cotton

Individual breeders of crops and livestock

Asparagus Growers Associations
South Carolina Experiment Station
Clemson College Livestock Sanitary Office
Fair Associations, Community, County and State
Wild Life Associations of South Carolina
The Grange, local, county and state
Chambers of Commerce, Civic clubs, such as Rotary, Kiwanis, and Lions
Farm Credit Administration (Federal) and local Production Credit Associations
Soil Conservation Service (Federal)
Rural Rehabilitation Work of Farm Security Administration (Federal)
Vocational Education in Agriculture (State and Federal)
Forestry Commission (State)
County Legislative Delegations (County)
Agricultural Committees, Senate and House, (State Legislation)
Purpose of Work: To give farmers up-to-date outlook information on the crops and livestock situation, including consumer demands, supplies and surpluses on hand, trends and prospects, in order that they may better plan their farming programs.

Results: County agents and specialists held 335 outlook meetings in all counties of the state, which were attended by 22,328 farm people.
Purpose of Work: To encourage and assist farmers in keeping complete records on their farming operations and farm business, in order that results may be studied and definite recommendations made for strengthening weak points and improving farm management.

Results: Farmers kept 147 complete farm records in 1938, which are being analyzed for definite information to be carried back to the farm people of the state for their information and guidance.
Purpose: To encourage the production of the length and quality of cotton used by South Carolina mills, and more economical production of larger yields of cotton per acre.

Results: Since 1926 when the cotton contest was started, 5810 farmers have completed five-acre cotton improvement contest demonstrations, showing the results of pure seed of improved varieties, proper fertilization, spacing and boll weevil control. During this period the average yield per acre for the state has steadily increased, and the percentage of 15/16 inch and longer lint produced on South Carolina farms has increased from an estimate of 20 per cent in 1926 to 96 per cent in 1938. In 1938 over 68 per cent of all lint grown in the state was one inch long and longer. (See charts on following pages).
YEARNLY PER CENT OF COTTON CROP 15/16 INCHES OR LONGER - 1929-1938

Chart showing yearly trend since 1929 in per cent of total crop in State 15/16 inch or longer.
AVERAGE ANNUAL YIELD OF LINT COTTON PER ACRE - 1928-1938

Chart showing trend of average yield of lint cotton per acre on South Carolina farms since 1928.
Purpose: To aid farmers to increase their per acre yields of corn where South Carolina will produce enough corn for food and feed.

Results of demonstrations are analyzed and carried back to farmers to enable them to study profitable methods of corn production.
Purpose: The county agents, with the help of the extension tobacco specialist located at Florence, conduct demonstrations showing improved methods in all phases of tobacco production. Results of these demonstrations are analyzed and carried back to all growers to enable them to produce more profitable yields of high quality tobacco.

Results: A total of 232 demonstrations in 1938, as shown above, rounds out six years of this tobacco enterprise demonstration work. Tobacco yields in South Carolina averaged 704 pounds per acre during the ten-year period, 1924-1933, and 889 pounds per acre for the four-year period 1934-1937. The quality of the tobacco grown in the state has also shown marked improvement.
AID IN CONSTRUCTING FARM BUILDINGS AND STRUCTURES-1938

Legend: Each dot represents a farm building or structure built in 1938 according to plans furnished by the extension service.

Purpose: To aid farmers in constructing modern efficient farm buildings at a minimum cost.

Results: Plans and assistance furnished farmers in constructing 1869 buildings and structures in 1938.
The Extension Service has worked continuously with farmers to aid them in organizing their efforts to obtain rural electrification. On January 1, 1939 a total of 17,000 farms had been reached with rural electric lines built by private power companies and the state and national Rural Electrification Authorities. In 1938 the extension service held 42 rural electrification schools and organizational meetings and conducted 354 demonstrations of the use of electrical equipment on the farms of the state.
Situation: While South Carolina produces cotton of the longest average staple length of any of the southeastern states, a high percentage of our cotton is lowered in value by improper handling on the farms and incorrect adjustment and operation of ginning equipment.

Purpose of Work: To teach farmers the proper methods of handling cotton on the farm and the ginners the correct adjustment and operation of ginning equipment in order that the quality of lint cotton may be improved.

Method: Forty-seven farmer-ginner meetings were held in 1938, with an attendance of 3157 farmers and 364 ginners.
Legend:

- County Soil Conservation Association
- County-owned power terracing outfit

**Purpose:** To enable farmers through organized effort to control erosion on South Carolina soils.

**Results:** Total of 20 voluntary county soil conservation associations operating 40 power terracing outfits under supervision of the county agents and in cooperation with the soil conservation service, terraced 48,224 acres of land in 1938. Since this work was started in 1935, a total of 145,778 acres of land has been terraced on South Carolina farms.
The extension service has cooperated with the soil conservation service in organizing soil conservation districts under the South Carolina law to enable farmers to take advantage of the National Soil Conservation program. Districts already organized are: the Edisto, Upper Savannah, Broad River, and Catawba. Those in process of organization are the Congaree and Lower Saluda.
Purpose: To improve the quality and value of livestock in South Carolina through the use of selected purebred sires.

Results: County agents and livestock specialists assisted farmers in selecting and purchasing 212 purebred beef bulls and 293 purebred boars in 1938.
Purpose: The encouragement of the use of purebred beef bulls to improve the quality of beef cattle in the state has been a part of the program of the extension service for many years.

Results: County agents report a total of 689 purebred beef bulls in use on South Carolina farms in 1938. Beef cattle production is rapidly assuming importance as a supplementary source of income on many farms in the state.
Legend: Each dot represents a cooperative shipment of hogs made by farmers in 1938 with the cooperation of the extension service. Shipments expressed in carlot equivalents.

Hog sales in 1938 totaled the equivalent of 1242 cars, which brought the farmers of the state a return of $1,402,117.
Chart showing cooperative carlot shipments of hogs per year by South Carolina farmers since 1928. Total 1938 cooperative shipments reached the equivalent of 1242 cars, the highest on record from the State.

Prior to the beginning of this demonstration work, South Carolina hogs sold as "soft hogs" on the northern markets, and brought several cents below the market price paid for finished hogs. As a result of hog feeding demonstration work, South Carolina hogs now sell on the same basis as hogs from the hog producing states.
Yearly returns to South Carolina farmers for hogs shipped cooperatively under supervision of extension service - 1928-1938. Returns from 1938 shipments totaled $1,402,117.
Purpose: To improve the dairy stock in South Carolina through the use of selected purebred bulls from production-tested dams.

Results: A total of 157 selected purebred bulls placed with farmers in service in state in 1938.
For over 20 years the extension service has aided and encouraged farmers to use purebred dairy bulls. As a result, 982 purebred dairy bulls were in use on South Carolina farms in 1938. Since 1919 the average milk production on South Carolina farms has increased 105 gallons per cow.
**Purpose**: To assist dairymen to obtain higher and more profitable milk production from their herds.

**Results**: In 1938 a total of 31 dairy herds having 3001 cows on test were enrolled in Dairy Herd Improvement Associations. The results of these demonstrations are aiding South Carolina dairymen to learn best methods of feeding, breeding, and dairy herd management for higher and more profitable production of milk. The cash income to South Carolina farmers from dairy products in 1937 was estimated at $6,268,000.
ANNUAL MILK PRODUCTION PER COW ON SOUTH CAROLINA FARM - 1919 and 1934

Chart showing increase in yearly milk production of 105 gallons per cow on South Carolina farms from 1919 to 1934.
TRENCH SILOS IN USE ON SOUTH CAROLINA FARMS IN 1938

Legend: Each dot represents a trench or box silo in use on a South Carolina farm in 1938.

Purpose: For over ten years the extension service has advocated the trench silo as a cheap, efficient means of storing silage for winter feeding of dairy cattle and other livestock.

Results: In 1938 South Carolina farmers used 395 trench silos and 7 box silos to store 21,846 tons of silage. Many of these silos were built by farmers unable to afford the expense of an upright silo.
Conotton Seed Treatment Demonstrations—1936-1938

Legend: Each dot represents a completed seed treatment demonstration.

Purpose: To aid farmers to control seed-borne diseases which cause difficulty in obtaining stands of cotton.

Results: A total of 431 demonstrations in 1936, 1937, and 1938, of a simple and inexpensive seed treatment showed a 21 percent increase in cotton plants per acre and an average increase of 86 pounds of lint cotton per acre over untreated plots. As a result of these demonstrations, seed for a total of 543,725 acres of cotton, or 42 per cent of the total crop in the state, was treated in 1938, increasing the value of the cotton crop of the state by at least $1,500,000.
MODERN LOOSE-FRAME BEEHIVES IN USE BY BEEKEEPERS IN 1938

Legend: Figures show number of modern loose-frame hives in use by beekeepers in 1938.

The extension service has urged and assisted beekeepers in transferring bees from old gums and box hives to modern loose-frame hives for greater convenience and efficiency. As a result, beekeepers had 7,859 modern loose-frame hives in use in 1938.
Legend: Each dot represents a commercial peach grower with whom the extension service is cooperating in the economical production of high yields of quality fruit.

Purpose: To enable farmers to establish and maintain commercial peach production on a basis of quality and production that will prove profitable and meet competition from other peach growing areas.

Results: Carlot shipments of peaches from South Carolina increased from 23 cars in 1923 to the equivalent of over 3000 cars in 1928 valued at $1,500,000.
Chart showing yearly shipments of peaches by South Carolina farmers since 1923. Shipments shown in carlot equivalents.

Shipments in 1938 totaled the equivalent of 3,000 cars, which brought the growers $1,500,000.
Purpose: To restore sweet potato production as a profitable farm enterprise in South Carolina.

Results: Over 300 cars of improved Porto Rico sweet potatoes will be shipped from the State from the 1938 crop at top market prices, as compared to 129 cars in 1937. Total production of improved Porto Rico sweet potatoes in South Carolina in 1938 for home markets, seed, and other purposes is estimated at 294,000 bushels, or the equivalent of 700 cars.
Along with the program to restore sweet potatoes as a money crop on South Carolina farms, the extension service has recommended a new-type sweet potato curing house for economy and efficiency of curing sweet potatoes. As a result of three years of this work, 114 of these houses were in use on farms of the state in 1938.
EXTENSION MARKETING WORK - 1928-1938

Annual value of products marketed cooperatively for South Carolina farmers under supervision of extension service, 1928-1938. Total 1938 cooperative marketing $4,431,370.
Purpose: To aid farmers in establishing and improving poultry flocks in order that they may produce the eggs and poultry needed in South Carolina and for other markets.

Results: Ten years of demonstration poultry records show an average annual profit above feed and other costs of $1.65 per hen. In addition, many valuable practices have been developed which are enabling poultrymen to increase their production and profits.

Records show that since 1923 cooperative sales of poultry by county agents have totaled 16,500,000 pounds, which have netted South Carolina farmers $3,279,178.
For ten years the extension service has recommended brick brooders as a cheap, efficient method of brooding baby chicks, and shown farmers how to build them. As a result of this work, farmers used 5,351 brick brooders in growing out their baby chicks in 1938.

Legend: Figures represent number of brick brooders in use in each county in 1938.
Purpose: To train farm boys and girls in improved farm and home practices, citizenship, health, and cooperation.

Results: A total of 967 4-H community clubs organized in 1938 with a membership of 18,542 white farm boys and girls.
4-H CLUB ENROLLMENT OF WHITE FARM BOYS - 1928-1938

Chart showing the yearly 4-H club enrollment of South Carolina white farm boys since 1928. The 1938 enrollment reached a new high level of 6,618 white farm boys.
During 1938 the extension service used educational motion pictures on crops, livestock, soil conservation, forestry, rural electrification, home demonstration, and many other subjects in teaching farm people improved methods and practices. These showings were made before 429 audiences made up of 62,914 farm people.

Legend: Each dot represents a showing of agricultural educational motion pictures to an audience of farm people.