

development of the program, and the use of research
workers' time in working up the program.

IV. Summary

Objective A in the Plan of Work has been practically accomplished in spite of the added work load from poultry marketing, the publication on Rhodesian tobacco, the State Fair Exhibit, and attending the Extension Summer School. The initial program is ready to present to County Agents. Refinements and new farm situations will become a continuous phase of the project.

Much of the work done in 1959 has, of necessity, been of a preparatory nature. All background information had to be developed. The program had to be developed from "scratch" since no prior work had been done in this field.

The major results of efforts during 1959 will not be evident for a couple of years. The program is of such a magnitude that it will be several years before the real impact and value can be determined. The program is not the kind that can be accomplished overnight but neither will the value be of such short usefulness. The program could well become the most useful tool available to Extension for program planning and program projection.

I am very grateful to the Experiment Station for the use of computing equipment, trips to meetings that aided in the

Talks to Groups -

1. Tazewell poultry school - Mr. Denver Bragg and I conducted a poultry school in Tazewell. Each of us led the discussion for about 2 hours. My part pertained to the outlook for poultry, costs and returns, and capital outlay. About twenty people attended.
2. Presented poultry outlook to Virginia Bankers Conference. Also served as chairman and resource person for the separate section on poultry.
3. Delivered talk on V.F.I. Mail-In Farm Record Program to meeting of entire West Central District Agents and assistant agents.
4. Discussed linear programming and its relation to farm records at East Central District meeting at Farville.
5. Conducted two tours through INM center during Institute of Rural Affairs. Explained the use of the machines and answered questions.
6. Talks to farmers in Mecklenburg, Pittsylvania, Lunenburg, Henry, Campbell and Botetourt on farm records, how to keep them and how to use them.

discuss problems associated with the work. They offered advice on the application of the work to local areas.

M. Routine Responsibilities

The normal load of extra-curricula Extension activities was performed. These are not listed in detail but include such assignments as are normally associated with the Institute of Rural Affairs, Extension Conference, and others. Staff meetings and seminars were attended, (I was on the Departmental Seminar Committee and had a part in arranging seminars). I participated in the school the department conducted for Co-op managers.

A general summary of the year's activities is:

	<u>Days</u>
Office -----	187.5
Field -----	46
Regional Summer School -----	23
Annual Leave -----	18
Sick Leave -----	15.5
Extension Conference -----	4
Out-of-State Meetings -----	10
Miles Traveled -----	11,370
News Articles -----	14
Radio Programs -----	5
Leaflets Prepared -----	4
Copies of Leaflets Distributed -----	1,075
<u>Pegs and Mags</u> ----- (copies) -----	27,000
Conferences with Agents -----	24
Farm Visits -----	23
Talks to Groups -----	17
Estimated Attendance -----	650
Meetings with Special Interest	
Groups (Egg Council, etc.) -----	4

The technique is rather effective in obtaining information from farmers. A group of 10-15 farmers are invited to the County Agent's office, or other suitable meeting place. Dr. Love directed the discussion of tobacco production so as to secure a fairly accurate picture. I recorded the information. The technique offers possibilities for obtaining other input-output data needed by Extension at a much lower cost than a field survey. Meetings were held in Chatham, Boynton, and Kenbridge. The respective agents were most cooperative in these ventures.

L. Out-of-State Meetings Attended

I attended two meetings of personnel connected with Regional Research Project S-42, one at Memphis and one at Clemson, South Carolina. The Experiment Station provided funds for both trips. The meetings were for the purpose of discussing research procedures applicable to farm resource adjustments. Since my farm management program parallels the research project, my attendance at the meetings was deemed desirable. I gained from listening to outstanding farm management research workers

News (March issue) printed the article. I was told it also appeared in a farm equipment trade magazine but I failed to see it.

2. Tobacco data was assembled and distributed to County Agents in the flue-cured tobacco area. Many said they used it in talks to farmers (Exhibit D).
3. Supervised the preparation of 1960 outlook for field crops in Virginia and actually prepared the section on tobacco.
4. Prepared a plan of work for the Farm Management Section of the Department. An effort was made to coordinate the work of the four specialists involved. It is the opinion of the persons involved that farm management Extension work may become more effective than it is at present. Several days were required to think this through and present it. The other specialists involved provided assistance.
5. Assisted Dr. Love in obtaining input-output information from farmers. Dr. Love originated the idea and led the discussions when meetings were held. I recorded the data and learned how to conduct similar sessions.

January 1 farm inventory in March or April contributed to the low number of records obtained this year. The ground work has been laid and participation should increase in 1960.

I. Regional Extension Summer School

I attended the Cornell Summer School and took courses in public policy and marketing. These courses aided in the development of a new Extension farm management program. Three weeks plus travel time were required.

J. State Fair Exhibit

The departmental exhibit at the State Fair this year required about 20 work days (and almost as much of my own time). I assisted with the construction of the basic unit and the power package. I assisted in setting up the exhibit at Richmond, stayed with it two days, dismantled it to return to Blackburg, and assembled it in the S.A.S. for Homecoming (more details of the exhibit appear in the departmental report).

K. Miscellaneous Articles and Activities

1. I prepared an article on tobacco harvesters and the economic feasibility of their use. The Roanoke Times, The Richmond Times Dispatch and the Extension Service

The report was studied along with other pertinent information on Rhodesia. Weights and monetary values were converted into U. S. equivalents along with an interpretation of terms unfamiliar to Americans. A manuscript was prepared and presented to Dr. Love for his appraisal. He has not returned it so the date of publication is uncertain.

About two weeks were required to produce the manuscript.

H. V.P.I. Mail-In Farm Record Program

Several man-days were devoted to the development, introduction, and assistance with the Mail-In Farm Record Program. I went with Mr. Livermore and Mr. Reynolds to Michigan State University to study a similar program. The program initiated in Virginia is reported in Mr. Reynolds' Annual Report.

I was responsible for the West Central District farm records. Only four records were submitted from the area due to the late introduction. Thus, little time was needed to supervise these records. Several visits to interested farmers resulted in their desire to participate in 1960. The inability to take the

currently discussing the initiation of the system with Dr. Luckham, Poultry Marketing specialist. (Dr. Luckham may mention this in his annual report.)

No specific poultry marketing program was undertaken during the period for obvious reasons. I did attend several Egg Council and State Poultry Federation meetings to represent V.P.I. Poultry outlook was prepared and presented to several groups, including the Agricultural Faculty and the Virginia Bankers Association. Several articles were prepared on poultry outlook. A limited amount of time was devoted to helping Dr. Luckham become acquainted with Virginia. He still confers with us on many of the problems he encounters.

An Extension bulletin on egg quality and uses of eggs was prepared. The manuscript was edited, artwork prepared, and I thought it was submitted for publication. However, it was not published for reasons I do not know.

- G. "Costs and Returns of Producing Fine Tobacco in Southern Rhodesia"

A copy of a research publication from Southern Rhodesia on the above topic was received by Dr. Love. He requested that I study the report and prepare a bulletin for distribution.

responsible for carrying on the poultry marketing work. I contributed as much time as possible to answering requests for assistance. It was felt these requests should be handled if possible rather than refusing to do poultry marketing until the vacancy was filled in July. My own farm management program suffered, however, by the amount of time required to continue the poultry marketing activities.

I continued preparing articles for Peep and Moo (Exhibit C) through the July issue. I was also responsible for the mechanics of the publication. Six issues totaling 27,000 copies were distributed during the period.

Mr. John Hill, Manager of Culpeper Farmers Cooperative, requested assistance in developing a record program for contract egg production. I devoted approximately 3 weeks to the project and developed a fairly complete record system. Mr. Hill used the system during 1959 on a trial basis and with excellent results. I have an appointment to again visit him on December 9 to determine if any changes should be made for 1960.

Mr. Elmer Kaylor, Rockingham Farm Bureau, has expressed interest in the above record system. He is

market price, changes in yields, increases in farm resources that are now restricting adjustments, and varying crop allotments. These will make the final solutions have a much wider area of application and give farmers some choice in farm organization with the associated net income.

The program will be introduced to farmers and County Agents in early 1960. January has been proposed but no definite time has been selected. Achievement this year has been as stated in the Plan of Work - "Since this is a new approach to the problem, it is difficult to budget time requirements for each step. However, the program for the six counties listed in the flue-cured tobacco area should be completed within the year of operation." In reality, the program has progressed rather rapidly in view of the other work done during the year.

Objective B will not be undertaken until after Objective A is completed.

F. Poultry Marketing -

The vacancy created by my transfer from poultry marketing to farm management was not filled until July 15. During the 7 1/2 months the position was vacant, I was

transfer functions that work are illustrated in vectors 21 through 33 of the matrix appearing inside the cover page of Exhibit B. The value of these transfers is clearly evident.)

Solutions obtained from preliminary programming serve as guides for changes that should be made in the selection of enterprises, price ratios, basic assumptions, and critical restrictions. Preliminary solutions also indicate the general direction adjustments will likely occur. For example, preliminary solutions to the organization of a farm with 60 acres of open land in Southside Virginia indicate swine, poultry, sheep, aromatic tobacco, and sweet potatoes to be profitable enterprises that could be added to increase farm incomes. These budgets have been re-checked to insure accuracy. Additional enterprises have been added that require labor during the surplus labor periods. These may or may not enter into later solutions but should be given the opportunity to do so. Hay crops may also become a source of cash income if markets exist.

Final refinements are now being made in the program. A series of programs will be run to determine changes that may occur in farm organization due to changes in

Interest is developing to the point that I am contemplating publishing the budgets in a series of leaflets. Each will contain a set, or series, of budgets applicable to a given area. If this is done, additional uses will be made of work done in 1959 but reflected in future reports of accomplishments.

E. Preliminary Linear Programming -

Preliminary linear programming is required to insure accuracy and assure the technique works for the program proposed. (The Experiment Station permitted use of computing facilities not available for Extension work.)

The Simplex Method, as developed by North Carolina State, was modified to increase the amount of data that could be used, add flexibility to the program, and make solutions more realistic. The idea of using transfer functions to replace duplication of activities had been advocated prior to the initiation of this project. The technique had not been developed completely, however, and had only limited use. Dr. Ralph Kline and I worked on this technique until it was acceptable and useful. Dr. Kline plans to use the technique in research work, and I plan to make full use of it in refining my Extension program. (For those familiar with linear programming,

amount of work involved is appreciated only by those who have prepared enterprise budgets and may appear to be a simple procedure to the inexperienced. To dispell erroneous ideas of the work involved, one week can be easily justified per budget. To prepare the budgets needed for the program, I had to devote considerable time of my own during non-office hours.)

Enterprise budgets selected for use in linear programming a farm with 60 acres of open land in South-side Virginia appear in Exhibit B. Many enterprises required resources in excess of those available on 60 acre farms in the area so they obviously could not be included. Such budgets will be used in subsequent linear programming of larger farm units. Hence, many enterprise budgets were prepared that do not appear in Exhibit B.

Many production specialists have requested copies of these budgets for use in their own work.

Mr. Roie Godsey, Swine Specialist, for instance, stated that he had wanted such budgets for several years. This is the first time such complete and accurate budgets have been developed. Other specialists have made the same general comments.

Counties included were Pittsylvania, Halifax, Mecklenburg, Charlotte, Lunenburg, Brunswick, Prince Edward, Nottoway, Amelia and Dinwiddie. Most County Agents were very cooperative and deeply interested in the findings.

- D. Input-output data were developed for those enterprises now produced in the area. Data were also developed for additional enterprises that appeared to offer economic opportunities. Approximately 75 separate enterprise budgets have been developed to date, incorporating a range in production techniques, varying yields, prices, etc.

This has been the time consuming phase of developing the program. Research results had to be ferreted out and studied. Production specialists were consulted to gain from first-hand knowledge and experiences. Conflicting research reports, conflicting opinions of specialists, and lack of reliable information added to the confusion.

Budgets had to be as realistic as possible but unbiased. They had to be appropriate to the farm situation or solutions obtained would be useless. (The

year but appears to offer substantial benefits in return.

- B. Compiled price expectations for those commodities farmers sell and for those items purchased by farmers. U.S.D.A. projected prices served as a guide but had to be adjusted to Virginia conditions. Price projections were needed in developing a sound Extension farm-management program. These projected prices will not be published as such but will be used in budgeting various enterprises. About two weeks were devoted to price expectations.
- C. Cooperated with Experiment Station personnel on a field survey in Southside Virginia. I needed to know what resources farmers now have before I could determine the most profitable use to make of these resources. The 1955 Census of Agriculture has become obsolete for such purposes so a field survey was indicated. Cooperating with the Experiment Station minimized Extension's cash outlay for the project and provided information in excess of what Extension could have justified obtaining. A total of 14 days were devoted to the field survey that would have required several months had I not cooperated with the Experiment Station.

Exhibit A, containing selected items of farm equipment applicable to farmers in Southside Virginia, was distributed to County Agents. The leaflet was not intended to be comprehensive because of the time involved in securing appropriate engineering data and then calculating the tables.

Several agents expressed appreciation for the leaflet and stated it would be used in practically all of their county programs. The Vocational Educational Department at V.P.I. obtained 300 copies for distribution to Vo-Ag instructors. Mr. McLearn commented that it was one of the best sources of information on farm machinery costs he had seen.

The technical committee of Regional Research Project S-42 accepted the formula for use in estimating machinery costs for the project.

The cost figures derived will be used extensively in the program I am undertaking. Adjustments in prices of equipment will be made as economic conditions warrant. Additional pages will be added to the leaflet as time permits.

Approximately one month was devoted to developing the formula and publishing the leaflet. This time requirement was not anticipated at the beginning of the

However, after studying available literature on the subject, I concluded such material to be too inaccurate for use. Obsolescence was often ignored and costs based on rate of annual use were inadequate. A new method of estimating machinery costs had to be derived.

Again, I ran into unexpected difficulty when attempting to determine the expected life of farm machinery in hours of use. The Agricultural Engineers had only vague "guesstimates" as to what a given piece of equipment should be expected to do on a farm. In other words, if I purchased a tractor, I would have no idea of the performance to expect from that tractor. I could find out only after it had worn out.

Nevertheless, Easley Smith and I arrived at a life expectancy, in hours of use, based on the best information available. These estimates are as accurate as the Engineers know how to make them.

A formula was then developed for estimating machinery costs. The rate of annual usage and obsolescence were used jointly to determine annual depreciation. Variable costs (operating costs) were calculated from Engineering data. Total costs were then calculated on a per-acre and a per-hour basis to facilitate ease of use.

II. Objectives in 1959 Plan of Work

The objectives appearing in the Plan of Work are re-stated to indicate progress made during the year.

Objective A: "To determine the nature and magnitude of adjustments needed in the fine-cured tobacco areas of Virginia which will achieve the most profitable systems of farming under a range of conditions with regard to prices of major products and quantities of available resources, such as land, labor and capital."

Objective B: "To determine the quantities of resources required to provide selected levels of net farm income."

III. Results and Accomplishments

Extensive progress was made during the year toward achieving the objectives as stated above. However, much information that I thought was available through other specialists and could be incorporated into my program was completely lacking. Thus, I was forced to develop material that should have been available from other sources.

Specific accomplishments during the year were:

A. "Guide for Estimating Annual Cost for Oiling and Operating Selected Farm Machinery," (Exhibit A).

I had assumed much of the information needed for an accurate estimate of machinery costs was available.

to control insects, etc. But, ironically, we do not have a sound program in Extension on how to combine the various crop and live-stock enterprises in the most profitable manner for a given farm or type of farm. This has remained a chance operation with the exception of budgeting procedures used by farm management trained personnel.

A relatively new technique has been developed that is extremely useful in farm management work. Linear programming determines the most profitable combination of resources and enterprises for a given farm situation. The major advantage of linear programming over budgeting is that linear programming arrives at the optimum combination whereas budgeting determines only that the calculated combination is more or less profitable than the one now used. Budgeting does not tell whether other uses of the resources than those considered would be even more profitable. Thus, linear programming appears to become an invaluable tool in Extension education.

In developing a program for Extension, I had no previous experiences to go on. I had to start with practically nothing and develop an entire new program that was acceptable, realistic, and have widespread use.

Annual Report
in
Farm Management

Harold W. Walker

December 1, 1958 - November 30, 1959

I. Introduction

I transferred from poultry marketing to farm management on December 1, 1958. The purpose was to develop a program that would provide guides to farmers in the flue-cured tobacco areas when choosing among alternative production opportunities. Personal knowledge of the area was thought to be of benefit in the development of such a program. The flue-cured tobacco control program has resulted in reduced tobacco allotments and lower farm incomes. Yields have increased and selling prices improved; nevertheless, farm incomes have been reduced. The possibility of still further downward adjustments in tobacco acreage and the impact of reduced net farm incomes will require adjustments in farming operations. Complementary enterprises will have to be added to relieve the declining income problem faced by tobacco farmers.

Little research is available to help with this problem. We have information on how to feed livestock, what varieties of crops to plant, how much fertilizer to use, when and how to spray

Annual Report
in
Farm Management

Harold W. Walker

Assistant Agricultural Economist

December 1, 1958 - November 30, 1959

III. Statistical Summary

(December 1, 1958 to November 30, 1959)

A. General

Days in Office	168
Days in Field	32
Days Devoted to Graduate Study	94
Annual Leave	12
Sick Leave	1 $\frac{1}{2}$
Miles Travelled	6433

B. Office Activities

News Articles	6
Radio Programs	5
Spec. or Feature Articles	3
Circular Letters	6
Departmental Staff Meetings	5
Extension Staff Meetings	16
Agricultural Faculty Meetings	5

C. Field Activities

Conferences with Individual Agents	28
Farm Visits	10
Tours or Field Days	1
Result Demonstrations Visited	4
Participation in Meetings:	
Electronic Farm Record Program	18
Ext. - TVA Program	6
Outlook	2

D. Miscellaneous Activities

Cooperative Managers Conference	
4 - H Short Course	
Annual Extension Conference	
Institute of Rural Affairs	
Communications Training School	
Preparation of the State Fair Exhibit	

specialist staff.

I also participated in preparing the 1960 outlook on farm supplies and costs for the November, 1959 issue of the Virginia Farm Economics.

It is felt that I gained a great deal of vital experience and knowledge in the process of preparing and presenting these outlook statements. In addition to the knowledge gained on my part, this information has a vital application in the activities of other professional agricultural workers and farmers throughout the state.

E. State Fair Exhibit

I assisted to some extent with the preparation of the departmental exhibit for the Virginia State Fair.

This exhibit was quite an educational accomplishment since it explained in an illustrative manner, to much of the public in attendance at the fair, what happens to the consumers food dollar.

trated on improving the quality of the TVA farm records and expanding the analysis phase of these records.

With the assistance of Mr. K. E. Loope, Associate Extension Economist, six meetings were held during the year in the TVA watershed counties with regard to analyzing individual farm records and improving the record keeping activities on the county level. In addition to these meetings, some preliminary information was prepared and distributed to the counties participating in the TVA program to assist county Extension personnel with interpreting their TVA farm record summaries.

I attended a TVA workshop-tour in western Kentucky in June which provided an opportunity for me to become acquainted with the farm management activities being conducted within the TVA program in that state.

As a result of these activities towards improving the TVA farm record program, it is felt that the county Extension personnel and TVA Test Demonstrators acquired more knowledge on what is necessary to maintain good quality farm records and also more knowledge of the benefits that are forthcoming from an accurate and complete farm record. In the interest of improving their individual farm record programs, nine TVA Test Demonstrators adopted and maintained the new electronic farm record system this year.

D. Outlook

In January of this reporting period, I presented the 1959 tobacco outlook at the annual outlook conference for the state Extension

Dr. G. C. Graf and Dr. Frank Ellmore of the Dairy Science Department, prepared the necessary forms to be used in this account and formulated the procedures to be used in implementing and maintaining this record on individual dairy farms. This program was designed to work in conjunction with the Electronic Farm Record system and was introduced and explained to County Extension personnel and dairymen on this basis.

In order to maintain this record, considerably more time is required by the record keeper in recording the necessary detail information. It is important to emphasize, however, that since there is more detail data obtained concerning the dairy operation, a more thorough analysis can be made of the operation at the end of the year.

Although there were no dairymen who actually kept this more detail record this first year, a great deal was accomplished in terms of familiarizing county Extension personnel and dairy farmers with the various detail items that were necessary in this record and the extremely important uses that could be made of the information that would be obtained by keeping this record. As a result of the introduction and explanation of this program this year, quite a number of dairymen have been able to study the mechanics of the record and make some concrete plans for setting up this record program on their farm next year.

C. VVA Farm Record Program

As was previously mentioned, the VVA farm record activities had practically reached an all-time low. Considerable effort was concen-

some definite accomplishments are apparent at this time which give an indication of the effectiveness of this program. These accomplishments include:

(a) County Extension personnel have become more educated with regard to what is involved in setting up and maintaining a good farm record.

(b) By routing the monthly forms and financial summaries through the county Extension office, county Extension personnel have had an opportunity to become more familiar with the management practices on individual farms in their county.

(c) Farmers as well as county Extension personnel have become more aware of the importance of a good farm record and its potential uses in solving various farm adjustment problems.

(d) The Extension Economists involved with the program have become more familiar with the management problems prevailing on the various types of farms enrolled in the program.

B. The Dairy Enterprise Record Program

In an effort to provide dairy farmers with a record that would allow them to obtain more detail information than could be obtained from the Electronic Farm Record Program alone, a dairy enterprise account was formulated and made available to all dairymen in the state. A definite need for this type of record was made known from the Virginia Dairymen's Association to the V.P.I. Dairy Science Department. Following this request, the Agricultural Economics Department, in cooperation with

A special demonstration was held during the Institute of Rural Affairs program at V.F.I. to further explain the record program to visiting farmers and county Extension personnel.

In addition to myself, those Extension Economists who were primarily instrumental in implementing the record program in the six Extension districts throughout the state included: Mr. D. U. Livermore, Mr. H. W. Walker, Mr. R. O. Russell, Mr. A. J. Ortega, Mr. J. B. Bell, and Mr. W. J. Nuckolls, Jr.

3. Maintaining the Program

A card file was established on each participating farmer in order to maintain a record of each participant's status throughout the year (Exhibit K). Status reports were made periodically throughout the year and sent to all Extension personnel concerning the progress of the program and specific problems and solutions as they were encountered (Exhibit L). County Extension personnel contacted the respective Extension Economist in charge of his district throughout the year with regard to specific problems in maintaining the program on the county level.

4. Results or Accomplishments

Eighty-one farmers representing forty-five counties throughout the state were enrolled in the program this year.

Since the first complete record year is not covered by this report, it is not possible at this time to thoroughly evaluate the results or accomplishments of this new farm record program. However,

Reviewed their operation prior to completing our plans.

2. Implementing the Program

The implementation of this program throughout the state was accomplished with combined efforts of the Extension staff members of the Agricultural Economics Department, District Extension Agents and County Extension Agents. The program was formulated and implemented on the basis of the County Agents playing a primary role in that the program operated through the County Agents' office within each county. Plans for implementing this program included enrolling a small number of farmers the first year since this was something new for everyone involved and it was felt that the experience and knowledge necessary to properly operate such a program could best be acquired by working with a limited number of persons.

The state was divided into the six Extension districts and an Extension Economist was assigned to each district with responsibility of assisting with implementing the program in the counties within his district. Meetings were held within each district to acquaint the county Extension personnel with the program. All County Agents and Assistant County Agents received copies of a guide for them to use prior to discussing the program with prospective participants (Exhibit A, I, and J). The County Agent was given the responsibility for the selection of participants from his county.

Radio and newspaper media were used on both the state and local levels in the process of introducing this program to the farm people..

the Agricultural Economics Department. To begin with, it was necessary to develop a system of coding the various items of expenses and receipts that were submitted on the monthly forms in order that the record information could be handled by electronic computing equipment (Exhibit C). Following the formulation of plans for coding the individual monthly records, procedures were developed for processing the financial summaries for individual farms. A form was developed for use with the electronic computing equipment in preparing the individual financial summaries (Exhibit H). These summaries were prepared monthly and returned to the farmer through his County Agent.

The farm inventories, which were previously mentioned, were maintained by the farmer during the year and the information necessary for making inventory adjustments was provided on the individual financial summaries.

Final plans concerning the analysis phase of the farm records were not completed during the period covered by this report, however, some preliminary plans were formulated with regard to the type of analysis that could be expected from the data that would be obtained (Exhibit I).

It is important to indicate at this point that a great deal of assistance was obtained from Dr. Warren H. Vincent of the Agricultural Economics Department at Michigan State University concerning the formulation of this program. A record program of this type has been in operation in Michigan for several years. Mr. D. U. Livermore, Mr. H. W. Walker and myself visited Michigan State University and

1. Formulating the Program

Considerable assistance was received from Dr. H. M. Love, Head, Department of Agricultural Economics, and Messrs. D. U. Livermore, K. E. Hoops and H. W. Walker, Extension Agricultural Economists, in formulating the plans, policies, and procedures for this new method of farm record keeping. In an effort to provide a means for the farmer to obtain complete and accurate record information, this program was established on the basis of the farmer mailing in his items of farm expense and farm income through his County Agent to the Agricultural Economics Department each month and maintaining a record of these items for individual farms by electronic computing equipment. This plan necessarily required establishing a procedure for the farmer, the County Agent, and the Agricultural Economics personnel to follow in order to assure the completion and proper handling of the monthly mail-in forms (Exhibit A). In addition to establishing policies and procedures, it was necessary to formulate the expense, income and inventory forms to be used by the participating farmers (Exhibit B, C, and D). Along with these forms, it was necessary to provide forms to be used by County Agents in submitting the monthly records and and forms to be used in transmitting records back to farmers for corrections (Exhibit E and F).

After establishing the procedure to follow in obtaining the completed monthly mail-in forms, it was necessary to outline a definite plan to be followed in processing the record data after it reached

In this day of increasing costs of inputs and declining prices of outputs, it is imperative that farmers know what their costs are and concentrate their efforts in organizing and managing their resources in such a way as to minimize cost or maximize profit. The only way the farmer can adequately acquire the necessary information concerning his cost structure from which he can make correct management decisions is to adopt and maintain a system of farm record keeping that will provide him with the needed information.

Also, the progress and effectiveness of the TVA farm record program had practically reached an all-time low. Many of the TVA Test Demonstration farmers in the state were not maintaining an adequate farm record system, and those who were maintaining fairly complete records were not reaping full benefits in terms of its usefulness in analyzing the farm business.

Since an urgent need existed for a sound and systematic farm record program, I concentrated my efforts in the area of formulating and implementing a statewide farm record program that would meet the needs of the farmers.

II. Extension Activities and Accomplishments

A. The V.F.I. Electronic Farm Record Program

The activities and results concerning the V.F.I. Electronic Farm Record Program can best be reported by separating this program into four primary parts; namely, formulating the program, implementing the program, maintaining the program, and accomplishments or results of the program.

Annual Report
in
Farm Management
Robert K. Reynolds

December 1, 1958 -- November 30, 1959

I. Introduction

There was some variation in my time devoted to Extension farm management activities during this reporting period since I was also undertaking graduate study on a part-time basis. Sixty per cent of my time was devoted to Extension farm management work the first nine months of this period while seventy-five per cent of my time was devoted to this work during the remaining three months.

My farm management activities during this period were focused primarily on developing and maintaining a farm record system that would provide participating farmers with complete and accurate information from which they could better make the necessary decisions concerning the organization and management of their farm resources. The farm record program prior to this year was inadequate both from the standpoint of providing accurate and complete information and establishing a system of record analysis that would be useful to individual farmers.

Because of the increasing need for farmers to make more precise decisions concerning their necessary farm adjustments, an adequate farm record program has become a must on any individual farm.

ANNUAL REPORT
IN
FARM MANAGEMENT

ROBERT K. REYNOLDS

ASSISTANT AGRICULTURAL ECONOMIST
DECEMBER 1, 1958 - NOVEMBER 30, 1959