

III. Appraisal of Past Year:

The Mail-in-Farm Record Program and the Farm Management Schools conducted in the District this year have proven very effective in teaching farmers how to identify and analyze their farm problems and how to choose a course of action that will lead to the solution of these problems. The fact that participating farmers are using this information in planning farm adjustments and as a guide for making business decisions, indicate the value of these efforts. Also the desire for additional training in farm management, as requested by most of the farmers that participated in the two series of Farm Management Schools this year, indicates a felt need is being met with this type of Extension training.

15. Other Activities Participated In:

Marketing:

Farmers have been helped in this district with marketing, both buying and selling. Agents have helped with feeder calf, feeder pig, feeder steers, commercial ram sales, and purebred beef and dairy cattle. A feeder calf sale is held at Abingdon for four counties. Feeder calf sales are also held at Lee, Tazewell, Wythe, Dublin, and Galax. The calves are consigned and nothing below the grade of medium is sold. Thus, it has served as a good tool in the upgrading of quality calves. Other practices, such as dehorning, castration of bull calves, vaccination, and testing of cow herd for T.B. and Bangs have to be performed before calves are eligible for the sale. This has resulted in quality calves that attract buyers. These sales for the most part have a higher selling average than regular market sales.

Much of the same thing is done for the feeder pig sale which also is conducted at Abingdon for the surrounding counties. The agents feel that these feeder sales tend to be a good teaching tool in preparing quality products which the public will buy with confidence and generally pay more; therefore improving the take home pay of the co-operators.

In addition to the above activities, the agents participated in the following activities: beef cow branding demonstrations, foot rot demonstrations, assisted with assembling 1964 wool clipp, attended 4-H Natural Resource Development Conference, attended southwest Virginia District 4-H Camp, attended two week Farm Management School, Attended three week program evaluation school, soils schools, tobacco demonstrations.

14. Farm Management in Wythe County:

Wythe County had five farmers participating in the V.P.I. Electronic Record program who received training in keeping and analyzing their farm records. A complete analysis of records kept by these farmers last year was made at V.P.I. and discussed with them. Areas of inefficient management were explained to them and recommendations for improvements were discussed.

One record analysis indicated some improvement over the previous year's record but this was only a step in the right direction. There is still room for continued improvement in management efficiency and especially in milk production per cow. His 1962 and 1963 record analysis can be compared as follows:

(Wythe County - Farm A)	<u>1962</u>	<u>1963</u>
Total Investment	\$41,268	\$40,941
No. of cows	23	19
Milk sold per cow	5,981 lbs.	6,043 lbs.
Man equivalents	2.0	1.0
Milk sold per man	67,751 lbs.	114,826 lbs.
PMWD per man	178	345
% cow turnover	43%	20%
Total Farm Receipts	\$9900	\$9425
Total Farm Expense	<u>\$10904</u>	<u>\$7728</u>
Net Farm Income	- \$ 1003	\$1697

13. Farm Management in Wise County:

Last year one record was completed in Wise County. This record indicated that the farmer was spending too much money on machinery. This was pointed out to him when the record was discussed with him.

Two farmers were helped in setting up inventories for this year's records.

12. Farm Management in Washington County:

Farmers in Washington County have been helped with farm records. These records are closed out at the end of the year. An analysis is made and this is discussed with the farmers. Suggestions for improvement are made. These records are also used in pointing out to other farmers, areas that are strong and areas that are weak with some suggestion for dealing with these problems on their farms.

Farmers were helped with their feed programs based on a forage test of their hay and silage. As the feeds on a farm account form a large part of the major expenses, a savings on feeds generally reflects more net farm income.

One farmer reported a savings of \$200.00 on his fertilizer bill as a result of having this topic discussed at the Farm Management School and making a change in his fertilizer practices.

This same farmer also said that he had changed from a commercial ration to a simple ration of corn and supplement. This ration cost \$27.00 per ton less and he is getting the same amount of production -- maybe more.

A farm visit resulted in savings of one day a week silage. Getting a sample of silage for teaching in the Farm Management School, it was noted that some silage was being wasted in the Bunker Silo. This silage was being dragged and trampled. Suggested to the farmer that he nail a board on top to make a lip on the trough so that the silage could not be dragged out. The farmer did this and said at a later date that it saved him one day's silage feeding a week.

We have spent quite a bit of time on quality silage as effected by date of cutting. In the past year, more improvement has resulted in quality silage than nearly any other practice I can name. This one would be hard to put a dollar-cent value on. However, I am convinced that the cattle in the county are a lot better fed as a result of this practice being adapted.

11. Farm Management in Tazewell County:

Tazewell County had five farmers participating in the V.P.I. Electronic Record Program that have received training in keeping and analyzing their farm records. A complete analysis of records kept by these farmers was made at V.P.I. and discussed with them individually in the county. Two new farmers were added to the program in 1964, and will have their records analyzed in 1964. After completing the record analysis of a 75 acre Tazewell County farm, the following information taken from his records indicate continuing progress has been made in increasing net farm income:

(Tazewell County - Farm A)	<u>1961</u>	<u>1962</u>	<u>1963</u>
Total Investment	\$29034	\$24751	\$26719
% Invested in land & bldgs.	63%	61%	58%
% Invested in machinery	12%	13%	12%
% Invested in livestock	12%	16%	16%
No. of cows (dairy-Grade A)	19	21	20
Milk sold per cow	7804 lbs.	7321 lbs.	9072
Man equivalents	1.1	1.4	1.3
Milk sold per man	134,797 lbs.	109,315 lbs.	139,575
PM&D per man	272	203	225
Total Receipts	\$8670	\$9810	\$12411
Total Expenses	\$7604	\$6472	\$7125
Net Farm Income	\$1066	\$3338	\$5286
Labor Income	-\$ 386	\$2120	\$3969
% Return on Investment	4.6%	4%	11%

Net returns expected from this proposed plan are \$8171. This is \$5927 more than the net return received in 1963. The farmer is planning to make the proposed adjustment, realizing that increases in production yields and closer attention to managerial details are essential for success in reaching this goal. After analyzing the 1962 records on one Smyth County dairy farm (manufactured milk) where his milk production per cow indicated only 5387 pounds of milk sold per cow, the farmer decided to rent additional land including another tobacco allotment, sell his dairy cows and buy beef cows from which he could sell feeder calves. The results of this decision are shown in the following comparison of his 1962 and 1963 records analysis.

(Smyth County - Farm C)	<u>1962</u>	<u>1963</u>
Total Investment	\$44338	\$48578
% Investment in machinery	10%	8%
% Investment in land and buildings	71%	65%
% Investment in livestock	14%	16%
% Investment in feed, seed, & supplies	5%	11%
Number of animal units	35	49
Man equivalents	1.5	1.5
Crop receipts	\$1152	\$2851
Total Farm Receipts	\$8089	\$10929
Total Farm Expense	\$4977	\$5404
Net Farm Income	<u>\$3112</u>	<u>\$5525</u>
Interest on Investment @5%	<u>\$2217</u>	<u>\$2429</u>
Labor Income	\$ 895	\$3096
% Return on Investment	2%	6%
PMWD per man	204	219
Crop Index	127%	143%

Also other groups of farmers requested information on topics taught in these schools. The Sugar Grove Young Farmers Club, the Chilhowie Young Farmers Club and the Glade Springs Farmers Club requested, and received, a program on Calculating Machinery Costs as a result of the interest shown in this topic by farmers who attended the farm management schools.

After analyzing the records on one Smyth County farm, the farmer requested assistance in farm planning to improve a 1963 net income of only \$2244. Linear programming was used to meet this request.

This was a 109 acre farm consisting of 26 acres of cropland, 75 acres of pasture and 8 acres of other land. He rented 12 acres additional cropland. Livestock on hand consisted of 9 dairy cows (manufactured milk), 24 beef cows, 1 beef bull, 49 beef calves, 49 ewes, 2 rams, and 1925 laying hens. After determining what resources this farmer had to work with, what his limitations were, and what enterprises were applicable to this farm and acceptable to the farmer, budgets were developed for these enterprises. The approximate hand method of linear programming was used to compare these enterprises with each other and to select a combination of enterprises that would give the highest net return. The combination that would do this consisted of 30 dairy cows (manufactured milk), 5128 laying hens, .4 acre Burley tobacco allotment, 40 acres corn grain, 9 acres corn silage, 41 acres alfalfa hay, and 75 acres Bluegrass pasture.

10. Farm Management in Smyth County:

Fourteen Smyth County farmers participated in the V.P.I. Electronic Record Program during 1964 and have received training in keeping and analyzing their farm records. A complete analysis of all records was made at V.P.I. and discussed with these farmers individually and in group meetings in the county. Areas of inefficient management were pointed out and comparisons made with state average figures for each type of farm. Suggestions were made for changes that could improve efficiency and provide opportunities for increasing net income.

Crop and livestock budgets were calculated to help determine which would be the most profitable enterprise or combination of enterprises to use in farm planning. This was based on the kind and quantity of resources such as land, labor, capital, and managerial ability that was available. Building and machinery costs were also budgeted to determine how they could be used most profitably and to compare ownership costs with the cost of custom hire to get various jobs done.

Least cost feed rations were also calculated to determine which feed rations would give the highest production of livestock or livestock products for the least cost under varying conditions.

As a result of the Farm Management School held in Smyth County, three farmers reported they were using soil tests more this year to determine the fertilizer requirements of their crops and that by shopping around they had been able to save \$5 to \$6 per ton on fertilizer purchased.

9. Farm Management in Scott County:

Assisted farmers and the agent in closing out farm records. These records were analyzed and improvement suggested to farmers.

One of the records in Scott County indicated that there was more labor on the farm than was need. The farmer said that this would resolve itself. A younger brother ~~was~~ on the farm was getting married and planned to leave. The farmer felt that he could hire day labor when needed to get the tobacco harvested which requires a lot of labor at different times of the year.

A new farm is being added to the Test Demonstration Program in Scott County. This will be a beef operation and is a part-time farm operation which is rather typical of the area. This farm will tend to serve this section as a good demonstration of proper land use.

8. Farm Management in Russell County:

The farm records were used in Russell County to assist farmers in making changes and adjustments. These records can be used in making adjustments on a lot of similar farms with like resources.

The Ralph Settle, Rapid Adjustment Farm, was one of the first to be linear programmed. Several adjustments in the programming were made as the answers came out of the machine. Ralph is in the process now of making some changes. One enterprize which he adopted that was suggested was the purchasing and feeding of low-grade lambs. He fed about 200 this year and did real well with this project.

7. Farm Management in Pulaski County

Pulaski county had eight farmers participating in the V.P.I. Electronic Record Program this year. For four of the farmers this was their first year keeping the record, therefore, no business analysis was available this year. A complete business analysis was made and discussed with the other four farmers. Areas of inefficiency were pointed out and recommendations for improvements discussed. One Pulaski county farmer's entire operation consisted of beef cattle. When the record was analyzed it showed that he was not fully utilizing his available resources. After doing some budgeting and evaluating the different alternatives he decided to add sheep to his operation. We will have to wait until this year's record is completed before we can tell how much net income was increased. However, the farmer reports that his net income is going to be higher than it was last year.

A meeting was held for dairy farmers in Pulaski county dealing with hay. Educational information was presented on the value of alfalfa as a feed and the cost of producing alfalfa. The cost of producing 100 pounds of T,D,N, from alfalfa was compared with the other hay crops. The objective of the meeting was to present to farmers facts about alfalfa that they can use in determining whether or not to keep it in their rotations.

A linear program was prepared on one grade "A" dairy farm in Pulaski county. The result indicated a few minor changes should be made. The farmer has not decided if he will make the change or not.

Several farmers were assisted in figuring the cheapest way to feed their livestock.

Two Unit I County Farm Management Schools were conducted in Pulaski county this year. A total of 22 farmers attended the two schools.

6. Farm Management in Lee County:

The farm records were closed out; analysis of records were made. Analysis of the records were discussed with the farmers and suggestions made for improvement of the farm operation.

Several of the records indicated that the amount of labor needed made these farms only a part-time job. This was pointed out to the farmers and was a surprise to some of them. Ways and means of using this labor to more advantage was pointed out if this were possible.

A Farm Management School for a second group of farmers was completed in Lee County on December 16th. An average of about ten farmers attended. These farmers indicated that they got a lot out of the school and thought it very helpful.

The Linear Programming has been completed for the Rapid Adjustment Farm of Ernest Whitt. This will be presented to him very shortly for his consideration. In the meanwhile, quite a bit of progress has been made. This includes the construction of a silo for additional silage. Loafing stalls for the dairy herd has been completed. Concrete slabs connecting all of this construction and also connecting the milking parlor has been completed. All of this should add up to a much more efficient operation.

5. Farm Management in Grayson County:

Grayson County had three farmers participating in the V.P.I. Electronic Mail-In-Record Program who received instructions in keeping and analyzing farm records. Two new farms were added to this program during 1964. A complete analysis of 1963 records was made at V.P.I. and discussed with the participating farmers. Areas of inefficient management were pointed out as indicated by their record analysis and recommendations for improvement discussed. One dairy farmer, who was producing manufactured milk increased net farm income from -\$65.00 in 1962 to \$1152 in 1963 by reducing total farm expense from \$6994 to \$5409. Most of this decrease was due to reduced expense for labor, purchased feed, and maintenance and repair. Dairy receipts increased from \$3497 to \$4796, while receipts from beef cattle decreased from \$2624 to \$571. Labor efficiency was above average both years, but improved even more in 1963 (from 300 PMSD/man to 410 PMSD/man).

4. Farm Management in Giles County

Giles county has one farmer enrolled in the V.P.I. Electronic Mail-In-Record Program. A complete business analysis was made and discussed with the farmer. Any areas needing improvements were discussed and recommendations made.

A machinery school was conducted in Giles county this year. Information presented at this school was:

Cost of Operating Machinery

Custom Operation versus Owning

Second-hand Versus New Machinery.

The farmers attending were interested and stated they would like to have additional schools of this type dealing with other farm problems.

3. Farm Management in Dickenson County:

One Mail-In-Record was completed in Dickenson County. This record indicated too much machinery for the jobs to be done. It also pointed out other possibilities of possibly a profit in truck crops due to the good market in that section and prices that could be obtained. This could be true for the section of the county in which this farm was located, Sandy Ridge. This section of the county is well adapted because of soil types and lay of the land for production of truck crops. There is also labor available and truck crops tend to use a lot of labor.

2. Farm Management in Carroll County

Carroll county had five participating farmers in the V.P.J. Electronic Record Program who received training in keeping and analyzing farm records.

A complete analysis of records kept by these farmers last year was made and discussed with them. Areas needing adjustment in the farm business were indicated with recommendations for improvement.

Two Unit I County Farm Management Schools were conducted in Carroll county this year. A total of 31 farmers attended the two schools.

B. Other Activities - Individual County Reports

1. Farm Management in Bland County:

Bland County had five farmers participating in the V.P.I. Electronic Record Program who received training in keeping and analyzing their farm records. A complete analysis of record kept last year on these farms was made at V.P.I. and discussed with the participating farmers individually in the county agent's office. Areas of inefficient management were pointed out and recommendations for improvement discussed.

One record analysis indicated continued improvement over the past three years that a Grade A dairy farm has been on the Mail-In-Record Program. This was the same farm that increased from -\$23.00 in 1961 to \$4538 in 1962. In 1963, the net income on this farm increased to \$5787. This increase has been due primarily to reducing expenses, rather than increasing total receipts. For example:

	<u>1961</u>	<u>1962</u>	<u>1963</u>
Purchased feed costs	\$7961	\$5744	\$5249
Gas and Oil Expense	\$2168	\$1697	\$1347
Machine costs/acre of crops	\$ 68	\$ 48	\$ 41

The necessity of reducing these expenses had been pointed out during discussion of previous years records. Milk production on this farm has increased over 1100 pounds of milk per cow during this period, but there is still room for improvement.

- (b) The objective of this phase was to teach practical applications of the management principles and record analysis which the farmers had learned from the use of the record program and from farm management school instruction.
- (c) Progress made in reaching this objective:
- (1) Linear programming has been used on one or more farms in six counties to help farmers appraise the resources with which they have to work and to plan the best use they can make of these resources.
 - (2) Farm Planning - T.V.A. Unit Test Demonstrators and other farmers throughout the district have been assisted with planning farm adjustments to improve efficiency and increase net farm income. They were shown how to spot areas of weak management in the previous year's records and to recognize how adjustments could be made to correct these problems.

3. I feel it was helpful and can change some decisions that might mean difference in success or failure, or profit or loss.
4. I have enjoyed the school very much. It has shown me that I need to keep better records and do more paper work.
5. The instructors points were very clear. I did not get enough arithmetic in school(grade school).

(2) A second series of Unit I Farm Management schools was held during the first three weeks of December for other interested farmers in the same counties, with a total attendance of 107 farmers. The three Farm Management Agents and the County Agents in participating counties conducting these schools and presented the same topics simultaneously in Group A, Group B, and Group C counties. This reduced the time required to complete these schools in the district from nine weeks to three weeks. This also permitted time to plan and prepare for an advanced school for farmers that attended the first schools either last winter or this fall. Additional training in farm management has been requested by most of those attending the Unit I schools.

3. Phase - Farm Planning

- (a) This phase has received emphasis as a follow through on training provided farmers who had participated in Mail-In-Record Program and the County Farm Management schools.

3. I think the school will be very beneficial to me in the future and I hope to be able to attend a more advanced school someday.

Group B

1. I would like to commend the Extension Service in holding this school. I think the material was more than adequate and well presented. Each instructor seemed to know his subject well and did an excellent job of presenting it.
2. The most profitable three days I have spent in forty-one years.
3. I think it makes you figure some before making decisions.
4. We need more information on the marketing system and process for selling livestock and products. A study of trends and conditions affecting prices and the best time or stage to sell, would be most effective in management. All the benefits from good management can be lost on market day.
5. Have some discussion on larger financing, insurance and interest rates.
6. It brings the whole farm picture to light.

Group C

1. Greatly appreciate this school. Would prefer at time of year when not in field work.
2. The school has been worth the time. I have learned a lot from being here. I hope I can put it to good use. I know it will help my operation.

A total of 184 farmers participated in these schools and received instruction in recognizing and using farm management principles and practices for improving management efficiency which could increase net farm profit.

Nine topics were presented in these schools:

The Decision Making Process, The Effect of Management on Farm Income, The Economics of Fertilizer Buying, Calculating Machinery Costs, Calculating Labor Costs, The Budgeting Process, Complete Crop Budgets, Using T.D.N. in Budgeting, and Complete Livestock Budgets.

An evaluation was made after each county school was completed to determine the farmer's appraisal of the value of this training to them. Almost everyone commented favorably on the schools and indicated a desire for further training in farm management.

Some of the comments the farmers made concerning these schools are as follows:

Group A

1. I think the school is very worthwhile. It would be fine, I think, to have some night classes. I think this school will help me to find the cost of production and tell whether to stay in or get out.
2. Very enlightening. Many simple places and things in which we may economize.

(2) Farm Record Analysis - The farm record, after it has been completed, is analyzed. After the analysis has been completed, the agent responsible for the Farm Management Phase of the program goes over the record with the County Agent, and the farmer in each county. Strong and weak points from the analysis are discussed. Proposed changes for improvement on the farm are made. Alternatives are pointed out to the farmer. It is then left up to the farmer to make the changes, if he so desires.

2. Phase - Farm Management Schools

- (a) This phase has received emphasis as a result of the study of farm records which indicated many farms have low net income as a result of inefficient management.
- (b) The objective of this phase was to teach farmers how to recognize and use correct farm management principles in improving management efficiency.
- (c) Progress made in reaching objectives:
 - (1) Farm management schools were held in eleven counties, Smyth, Washington, Scott, Lee, Russell, Tazewell, Bland, Wythe, Pulaski, Grayson, and Carroll, between January 27 and March 27, 1964. Three groups were formed from these counties, with three weeks being required to complete the school in each group.

II. Project Area - Southwest District

A. Agricultural Production, Management, and Natural Resource
Development

1. Phase - Farm Management Farm Records

- (a) This phase has received major emphasis as a result of requests for assistance with farm management problems and a need for more factual information upon which to base decisions.
- (b) The objectives of this phase are to make farmers aware of the importance of keeping accurate farm records as a basis for farm planning and to help them increase their knowledge and application of improved farm management practices.
- (c) Progress made in reaching objectives:
- (1) Farm Records - Farmers are assisted in starting farm records at the beginning of the year. At the end of the year, these records are closed out so that a complete farm analysis can be made. County agents and farmers were worked with in the counties of Washington, Scott, Lee, Russell, Wise, Dickenson, Smyth, Tazewell, Grayson, Wythe, Bland, Carroll, Pulaski, and Giles. The job was accomplished by different methods in each of the counties. In some of the counties, an individual farm was visited and all of the information obtained to complete the close out. In other counties, the farmers were asked to come to the office and a team of the Agents helped to complete the job.

The Valleywide Test Demonstration Association is composed of the Test Demonstration Farmers from each of the seven Valley states. This Association works with the Tennessee Valley Authority, and the Land Grant Colleges in each of the seven states. These states are Virginia, North Carolina, Georgia, Tennessee, Alabama, Mississippi, and Kentucky.

The local farmers have been involved by serving as officers, directors, or on committees assignments in this organization.

The Valleywide Association in cooperation with the Tennessee Valley Authority and the Land Grant Colleges has sponsored the 4-H Regional Resource Development Conference at Fontana Village, North Carolina, since 1955. Each county within the Tennessee Valley Watershed has the privilege of sending a boy and girl delegate to this conference.

The objective of this conference is for the delegates to study the natural resources of the seven states. Leadership is promoted by having the delegates themselves take a very active part on the program. This conference has had a lot of influence on some of our young people and has done a real good job. In the human resource section, a real good job has been done in encouraging additional education and training to proposed for productive employment.

I. Local Leadership Involvement:

The Southwest Virginia Agricultural Association and the County-wide Association of Test Demonstration Farm Families involve local people for leadership in the counties and on a district basis.

The Southwest Virginia Agricultural Association has a Director from each of the Valley counties, all or part of which are in the T.V.A. Watershed. The Officers of the Association are also farmers from these counties.

The major objective of this Association is to promote better agriculture and living for the people of this region. This include the development of industry and recreation in the area.

The Directors of this Association meet twice during the year to conduct the business of the Association.

One of the accomplishments this year was the approval by the State ASCS Committee to make payments for fertilizer use on NPK basis rather than on a grade basis as in the past. This change had been recommended to the Committee for a number of years by the Association and applies to all of the farmers in Virginia.

The County Test Demonstration Associations have also developed leadership and promoted good agricultural progress in each of the valley counties. Local people are elected as officers of the county associations.

FARM MANAGEMENT ANNUAL REPORT

Southwest District

1964

Farm Management Agents:

Hugh Jones, County Agent-at-Large, Marion. Va.

Evans R. Scyphers, Jr., Ass't County Agent. Pulaski Va.

Ashton W. Sinclair, County Agent-at-Large, Atingdon, Va.