

AGRICULTURAL EXTENSION SERVICE

STATE OF VIRGINIA

PLAN OF WORK

IN

Marketing and Utilization of
Agricultural Products

Project IV

July 1, 1963 - June 30, 1964

Persons Assigned to Project

<u>Name</u>	<u>Title and Area of Work</u>	<u>Percent of Time on Extension</u>
F. W. Cooler ✓	Associate Extension Food Technologist	75
L. L. Denison	Assistant Extension Agricultural Economist	100
R. W. Engel	Head, Department of Biochemistry and Nutrition	8
R. P. Jenkins	Assistant Extension Agricultural Economist	100
D. U. Livermore ✓	Agricultural Economist, Project Leader, Extension Economics, Management of Farm Service Agencies	100
H. M. Love	Agricultural Economist, Chairman of Department	33 1/3
W. R. Luckham	Assistant Extension Agricultural Economist	100
G. J. Nageotte	Associate Extension Dairy Specialist	100
A. J. Ortego, Jr.	Assistant Extension Agricultural Economist	75
K. C. Williamson	Associate Extension Animal Husbandman	100

DATE APPROVED: March 14 1963

SIGNED

D. U. Livermore
Chairman

DATE APPROVED: March 16 1963

SIGNED

W. H. Doughty
State Director of Extension

DATE APPROVED: JUN 27 1963 1963

SIGNED

Lloyd H. Davis
Administrator, Federal Extension
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Agriculture

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EDUCATIONAL PLAN

PROJECT AREA: Marketing and Utilization

PHASE: General Economic Education in Marketing

FISCAL YEAR: 1963-64

The Situation: Many people fail to understand the basic concepts of the American market price economy because few have had formal education related to the economic system. The complex roundabout method of production and distribution which depends upon specialization often obscures the impersonal directions given to producers and marketers by a price-guided market system. The wide span in both time and space between producers and consumers and the multiplicity of functions to be performed render communications among various groups difficult, and often give rise to misunderstanding between segments of the industry. Most people are unaware of the cost components that contribute to the total retail price.

The Specific Problem: People lack knowledge and understanding of our market price economy as it affects everyday living.

The Program Objective: For people to acquire knowledge and understanding of our market price economy and skill in its application to everyday living.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
1. For people to acquire a greater understanding and knowledge of our market price economy. 2. For people to acquire greater skill in application of the economic principles of marketing to their individual situation.	1. Mass Media	Weekly	Long	. Informal Questions or quiz before and after lectures
	2. Talks	Upon request	Agricultural Economics Staff	
	3. Illustrated lectures	June & other times	Ortego or Love	
	4. Agent leader training		Agricultural Economics Long 4-H Department Slayton	

EDUCATIONAL PLAN

PROJECT AREA: Marketing and Utilization

PHASE: Market Structure

FISCAL YEAR: 1963-64

The Situation: Technological improvements, integration, mergers, and consolidation have changed the number and size of businesses in the industry of agriculture. Changes have occurred in consumer preferences and demand for various agricultural products for both domestic use and export trade. Government and industry programs, affecting the production and marketing of agricultural products, extend over more products than ever before. These and other factors have considerable impact upon the market structure for agricultural products. Such conditions and their implications require continual change in the market structure to maintain or improve the efficient and orderly marketing of agricultural products.

The Specific Problem: Lack of knowledge and understanding of the market structure and the economic implication of changes in government influence, number, size and types of firms, consumer demand, technological improvements, industry organization, and export-import trade, etc.

The Program Objective: For the industry of agriculture to recognize, and make rapid adjustments to changes in market structure, and to develop market structures which will contribute to more orderly and efficient marketing.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
1. For persons engaged in the agricultural industry to become aware of the causes and impact of changes in the market structure.	1. Demonstrations a. Yearling sales b. Tele-auction for hogs and lambs c. Slaughter cattle sale	Various times throughout the year	Williamson Allen Denison Godsey Williamson	1. Degree of acceptance by both producers and handlers.
2. For persons engaged in the marketing of agricultural products to improve their knowledge and skill in evaluating alternative market structures.	2. Assistance to industry groups and firms a. Poultry b. Dairy c. Livestock d. Fruit & vegetables e. Tobacco	During the year	Luckham Ortego Williamson Jenkins Livermore & McMurtry	2. Informal appraisal of improved situation.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
3. For persons in the agricultural industry to rapidly adjust to changes in market structure and to develop more efficient market structures.	3. Mass Media	During the year	Above staff and county agents	3. None
	4. Talks	During the year	Above staff and county agents	
	5. Feasibility analysis for establishment of new plants a. Livestock b. Dairy c. Vegetables	Upon request July-Aug.	Williamson Denison Ortego Jenkins	

EDUCATIONAL PLAN

PROJECT AREA: Marketing and Utilization

PHASE: Utilization

FISCAL YEAR: 1963-64

The Situation: Producers and marketers of agricultural products lack knowledge of consumer preference, acceptance, motivation, and behavior which govern the ultimate utilization of these products. New products and new improved uses for existing products are being developed continuously and offer opportunities for the expansion of the markets for agricultural products. The lack of knowledge by marketers and consumers often results in an excessive time lag in adoption of new products and new uses of agricultural products. Publicity hungry individuals often release reports which confuse and misinform consumers. These reports concern fat in the human diet, and the contamination of agricultural products from feed and food additives, chemical residues and nuclear fallout.

The Specific Problem: People lack knowledge and understanding of the economic implications of new agricultural products, new and improved uses of existing agricultural products, and comparative nutritional values of foods.

The Program Objective: For people to acquire a greater understanding and knowledge of the economic implications of new agricultural products, new and improved uses for existing agricultural products, and comparative nutritional values of foods.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
1. For people to become aware of the economic and nutritional import of new products and new and improved uses of existing agricultural products.	1. Demonstrations a. Home utilization of dairy products. b. Retail customers flow analysis c. Agent and leader training demonstrations on meat selection and utilization.	On request of home agents Upon request Upon request	Nageotte Long Backus	1. a. Number of demonstrations given by home demonstration agents & club leaders. b. Changes made by firms. c. Number of demonstrations given by home demonstration agents & club leaders.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
2. For people to acquire greater knowledge and skills for evaluation of the potentials of new products and new uses of existing products.	2. Work with individual firms and industry groups a. Fruit & vegetables b. Dairy c. Honey	Upon request	Cooler & Jenkins Nageotte & Ortego Amos	2. Number of firms introducing new products.
3. For consumers and marketers to adopt new products and uses that will improve their economic and/or nutritional well being.	3. Talks a. Dairy b. Consumer economics	Upon request	Nageotte Long	3. Informal appraisal
	4. Mass media	Periodically	Nageotte Jenkins Ortego Long Cooler	

EDUCATIONAL PLAN

PROJECT AREA: Marketing and Utilization

PHASE: Quality

FISCAL YEAR: 1963-64

The Situation: There is great variation in the perishability and quality of agricultural products. Each product has its own special handling, storage and quality identification requirements. The movement of each product through marketing channels demands strict adherence to quality maintenance requirements for it to reach the consumer in an acceptable condition. In many instances, these requirements are not met, resulting in loss of products, value, and consumer acceptance.

The Specific Problem: Producers, marketers, professional and regulatory workers, and end-users lack the knowledge, skills, and equipment necessary to encourage quality production, identify it, and maintain the quality of products demanded by consumers.

The Program Objective: For producers, marketers, professional and regulatory workers, and end-users to acquire and use the knowledge, skills, and equipment necessary to encourage quality production, identify it, and maintain the quality of products demanded by consumers.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
1. For producers, marketers, professional and regulatory workers, and end-users to become aware of the importance and need of quality production, its identity, and the necessity for maintaining quality throughout the marketing system.	1. Conferences & workshops a. Dairy Fieldman's Conference b. Dairy lab. tech. workshop c. Sanitarians Short Course	March March June	Nageotte Nageotte Nageotte	1. Informal evaluation of increased skills and increase numbers of dairy plant quality control programs.
2. For marketers, producers, professional and regulatory workers, and end-users to develop the skills necessary for encouraging quality production, identifying it, and maintaining quality of agricultural products.	2. Assistance to individual firms a. Dairy b. Fruit & vegetables c. Poultry d. Wool e. Livestock f. Food processors	Various times during year	Nageotte Jenkins Luckham Allen Williamson & Godsey Cooler	2. Informal evaluation.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
3. For producers, marketers, professional and regulatory workers, and end-users to adopt methods and techniques which will insure production, identity, and maintenance of high quality agricultural products.	3. Assistance to commodity groups a. Poultry b. Fruit & vegetables c. Dairy d. Livestock e. Wool f. Field crops	Various times throughout the year.	Above staff & county agents	3. Informal evaluation
	4. Mass media	Various times of year.	Above staff & county agents	4. None
	5. Talks	As requested	Above staff & county agents	5. None

EDUCATIONAL PLAN

PROJECT AREA: Marketing and Utilization

PHASE: Price Analysis

FISCAL YEAR: 1963-64

The Situation: Decisions on production, quality, grade, processing, marketing, and movement of agricultural products intra-state and inter-state, require price information on size, grade, volume by geographic markets. Prices vary according to supply and demand relationships of individual products, by quality and grade, location, federal and state programs, and other factors. Changes in consumer behavior cause revisions of the price structure for agricultural products which require periodic evaluation. Decisions are often made without adequate price and market information resulting in inefficient production, assembly, processing, and distribution of agricultural products.

The Specific Problem: Lack of adequate and timely information and its use by marketers on price variations, supply and demand relationships, price formulation, competitive position for an area or for an industry, forecasting, and impact of government regulations and price programs.

The Program Objective: For marketers to accept and use adequate and timely information on price variations, supply-demand relationships, price formulation, competitive position of an area or an industry, forecasting, and the impact of government regulations and price programs on the operation of their businesses.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
1. For marketers to become aware of the importance and need for evaluation of price variations and market conditions in planning and operating their businesses.	1. Mass media on: a. General economics b. Consumer economics c. Poultry d. Dairy e. Fruits & vegetables f. Livestock & meat	Throughout the year	Livermore Long Luckham Ortego Jenkins Denison Williamson Godsey Allen	1. None
2. For marketers to become more skilled in evaluating the impact of price changes, forecasting and market conditions on their respective segment and business.	2. Individual firm assistance a. Fruit & vegetables b. Livestock & meat	As requested	Jenkins Williamson	2. Informal evaluation of individual firms.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
3. For marketers to more skillfully apply price analysis information in adjusting their operations to market conditions.	3. Talks	During the year	Above staff & county agents	3. Adoption of changes in marketing practices and methods based on price information.
	4. Assistance to industry groups	As requested	Above staff & co. agents	4. Informal evaluation.
	5. Conference & workshops a. Bankers Conference b. Milk Pricing Workshop for Cooperative Directors	March	Staff	5. a. None b. Questions and problems on presentations

EDUCATIONAL PLAN

PROJECT AREA: Marketing and Utilization

PHASE: Assembly of Agricultural Products

FISCAL YEAR: 1963-64

The Situation: Marketers of certain commodities are handicapped in marketing their products because of small production units. These small units are unable to provide buyers with a sufficient and constant supply of satisfactory quality products. Lack of adequate facility assembly points inhibits the concentration of larger volumes with greater selection necessary to attract more buyers. True market value of products may not be accurately reflected on a market which is characterized by small volume and few buyers. Small volume makes transport and other marketing functions more costly.

The Specific Problem: Marketers lack the knowledge of the advantages and efficiencies derived from assembling the production of many small units into larger volumes to meet buyer demands and product specifications. Current assembly facilities and practices for certain commodities are inefficient and in some cases obsolete.

The Program Objective: For marketers to adopt new techniques, methods, and facilities, that will result in increased efficiency in assembling farm products.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
1. For producers and marketers to become aware of the need for increasing volume and efficiency in assembling farm products.	1. Special graded sale demonstrations a. Feeder cattle b. Feeder pigs c. Slaughter cattle d. Market hogs e. Wool pools f. Market lambs	Spring & fall Throughout year Throughout year Throughout year Spring Spring	County agents Williamson Godsey Allen Carter	Participation & price advantage of special sales.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
2. For producers and marketers to develop the knowledge and skills necessary to increase volume and improve efficiency in the assembly process.	2. Assistance to industry groups and firms a. Organization h. Product specification for acceptance and analysis of supplies available in area c. Survey of buyer demands d. Improving assembly facilities e. Honey assembly	Periodically Sept-Dec Periodically	Livermore & above staff Amos Staff	Success of organization Volume sold None
3. For producers and marketers to adopt new techniques and methods that will result in increased efficiency in the assembly process.	3. Mass Media 4. Talks to groups	Periodically Periodically	Staff Staff	None

EDUCATIONAL PLAN

PROJECT AREA: Marketing and Utilization

PHASE: Management of Marketing Firms

FISCAL YEAR: 1963

The Situation: Continuous changes in the production, handling, storage, processing, and distribution of products characterize the industry of agriculture. These changes necessitate adjustment in the management and operation of marketing and supply firms. Inefficient use of available resources increases the cost of marketing. Many managers lack knowledge and skills necessary to develop and evaluate alternative opportunities and to use these in management decisions. They require educational assistance in acquiring and applying knowledge and skill in the operation of their business.

The Specific Problem: Failure of management to make optimum use of resources available to firms; and to recognize the benefits of new and improved technology and methods of procurement, assembly, processing, packaging, and distribution of agricultural products and farm production supplies.

The Program Objective: For managers of marketing and supply firms to apply greater knowledge and skills to management procedures and to adopt new and improved techniques and facilities which will result in optimum use of resources and greater efficiency of operation.

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS
1. For managers to become aware of the need to improve management and operational procedures and methods.	i. Assistance with individual firm problems a. Supply firms Farm equipment Feed firms b. Marketing firms	Various times throughout the year	Walker Ortego	Reports of the number of plants that have made various changes, number of plants that have adopted new management and operational plans, methods and techniques affecting economies of operation. Where possible, obtain the results of such changes in terms of economic improvement of operation.
2. For managers to acquire greater skill in the application of the business management principles of planning, organizing, and directing, coordinating and controlling.	Fruit & vegetable marketers Livestock markets & meat packers Retail grocery stores EGG processors & hatcheries Milk processors		Cooler & Jenkins Williamson & Denison Long Luckham Nageotte & Ortego	

TEACHING OBJECTIVES	METHODS	WHEN	BY WHOM	PLANS FOR EVALUATION OF ACCOMPLISHMENTS		
3. For managers of marketing and supply firms to adopt new and improved management procedures and methods that will result in greater efficiency of operation and use of resources.	2. Demonstrations	July-Sept.	Cooler			
	a. Vegetable canning					
	3. Mass Media	a. Articles in trade journals	Throughout the year		Same as Method #1	
	b. Extension publications					
	c. Talks					
	4. Conferences and workshops	a. Dairy plant management	May		Nageotte & Ortego	
	b. Auction market managers		Jan.			Williamson & Denison
	c. Auction market owners & operators		Jan.			
	d. Farm equipment dealers		Sept.		Staff	
	e. Food processors		March & Nov.		Cooler	
	f. Frozen food locker managers		June		Backus	

AMA PROJECT 2525-72

LIVESTOCK AND MEAT MARKETING

LARRY L. DENISON

- Work Area: Management of Marketing Firms
- Problem: Many livestock marketers do not have the information nor skill to recognize inefficient areas of operation within their firms. Hence, it is difficult for them to make improvements.
- Objective: For marketers to become aware of and apply principles of management which will improve the efficiency of their operations.
- Audience: Managers of livestock marketing firms.
- Subject Matter: A. Principles of management (planning, organizing, directing, coordinating, and controlling).
B. Improved work methods, layout, and work stations.
- Methods: A. Individual firm assistance
B. Conferences or workshop
- Evaluation: Adoption of recommended procedures and techniques and the resulting reduction in costs will be used.

- Work Area: Market Structure
- Problem: Persons in the livestock industry lack knowledge and understanding of the market structure and the economic implication of changes in type, size, and number of marketing firms.
- Objective: For persons in the livestock industry to understand and utilize information concerning the impact on the market structure caused by additional firms and new types of firms.
- Audience: Livestock marketers and potential marketing firm owners.
- Subject Matter: A. Feasibility of new marketing firms.
B. Results of tele-auction - a new method of livestock marketing.
- Methods: A. Individual assistance.
B. Reports and talks.
- Evaluation: A. Degree of acceptance by producers and handlers.
B. Adoption of recommendations made.

Work Area: Price Analysis

Problem: Livestock marketers lack adequate and timely information on price variations, supply and demand relationships, and price forecasts. Hence, inefficient production and marketing of livestock and meat often results.

Objective: For livestock marketers to accept and use adequate and timely price information in marketing decisions.

Audience: Livestock marketers.

Subject Matter: A. Seasonality and price trends
B. Price outlook
C. Relative supplies and consumption

Methods: A. Mass media
B. Talks

Evaluation: Informal

AMA PROJECT 2525-97

POULTRY AND EGG MARKETING

W. R. LUCKHAM

- Work Area: Management of Marketing Firms
- Problem: Many managers of marketing firms in the Virginia poultry industry lack the knowledge needed to make adjustments in the management and operation of their firms to enable them to more capably compete. Without a knowledge of their costs, areas for improving efficiency are difficult to pinpoint.
- Objective: For managers of marketing firms to apply greater knowledge and skills to management and operational procedures, and to adopt new and improved techniques and/or facilities which will result in optimum use of resources.
- Audience: Egg processors and hatcheries.
- Subject Matter:
- A. Principles in firm management, such as planning, organizing, directing, coordinating, and controlling.
 - B. Plant layout, product flow and work station design and placement as a means of increasing operational efficiency.
- Methods:
- A. Assistance to individual firms with management problems to determine costs of operation, areas of inefficiency, and procedures that management could adopt to reduce costs of operation.
- Evaluation: Changes made as a result of this program will be informally evaluated; where possible economic measures will be used.

Work Area: Price Analysis

Problem: Marketers of poultry products lack adequate and timely information on price variations, supply and demand relationships, price forecasts, the competitive position of the industry and the impact of government regulations and price programs.

Objective: For marketers and others to use adequate and timely information on price variations, supply and demand relationships, price forecasts, the competitive position of their industry and the impact of government regulations and price programs in making decisions on the operation of their business.

Audience: The poultry industry.

Subject Matter:

- A. Seasonality and price trends.
- B. Seasonality and production trends.
- C. Analysis of interregional competition.
- D. Seasonal demand patterns.
- E. Short and long run outlook.
- F. Analysis of Government programs.

Methods:

- A. Mass media
- B. Talks
- C. Assistance to industry groups
- D. Conferences

Evaluation: Requests for information, talks, etc.

- Work Area: Market Structure
- Problem: The poultry industry lacks knowledge and understanding of the market structure and economic implications of changes in such forces as government programs, mergers, industry organization and the number and size of poultry firms.
- Objective: For members of the poultry industry to make rapid adjustments to changes in the market structure and to develop a more efficient marketing structure.
- Audience: The poultry industry.
- Subject Matter:
- A. Analysis of various forms of industry organization.
 - B. Analysis of costs and competitive position of industries in other areas and comparison with similar information for the Virginia poultry industry.
- Methods:
- A. Mass media
 - B. Talks
 - C. Assistance to organizations, groups and to individual firms.
- Evaluation: Changes made that improve overall industry efficiency.

Work Area: General Economic Education in Marketing

Problem: People lack knowledge and understanding of our market price economy as it affects everyday living.

Objective: For people to acquire knowledge and understanding of our market price economy and to develop skill in its application to everyday living.

Audience: General public.

Subject Matter: Analysis of the market price economy.

Methods: A. Mass media
B. Talks

Evaluation: None

A.M.A. PROJECT 2525-171

Fruit and Vegetable Marketing
Robert P. Jenkins

Work Area: Management of Marketing Firms

Problem: Many managers of fruit and vegetable marketing firms lack the knowledge and skills necessary to recognize (1) the benefits of new technology, (2) apply this technology to their firms, (3) locate inefficient areas within their businesses and (4) make needed adjustments both with their plants and during procurement and distribution.

Objective: For fruit and vegetable marketers to apply greater knowledge and skills in making business adjustments and in evaluating and adopting new technology.

Audience: Managers of fruit and vegetable marketing firms.

Subject Matter: A. Business adjustments
B. Cost accounting procedures
C. New technology

Methods: A. Individual firm assistance
B. Mass media

Evaluation: Results will be evaluated in terms of adjustments made with emphasis on monetary gains resulting from adjustments.

Work Area: Price Analysis

Problem: Lack of adequate, timely, and concise information and skill in its usage by fruit and vegetable marketers relating to price variation, supply and demand relationships, price formulation.

Competitive position of Virginia producers and impact of government regulations.

Objective: For fruit and vegetable marketers to accept and use adequate, timely, and concise information on factors affecting the selling price of and demand for their product.

Audience: Fruit and vegetable marketers

Subject Matter: A. Outlook information
B. Methods of making adjustments needed because of changes in the supply-demand relationship as indicated by trend and outlook information.
C. Methods of establishing raw product prices based on an analysis of value of the raw product to the processor.

Methods: A. Mass media
B. Individual farm assistance

Evaluation: Evaluation will be based on:
A. The accuracy and timeliness of the information disseminated.
B. What adjustments are made within firms due to this information.

Work Area: Quality

Problem: Producers, marketers, and consumers of fruits and vegetables lack the knowledge, skills, and equipment necessary to produce, identify, maintain, and properly use high quality produce.

Objective: For producers, marketers, (including processors) and consumers to acquire and use the knowledge, skills, and equipment necessary to produce, maintain, identify, and properly use high quality produce.

Audience:

- A. Producers
- B. Marketers
- C. Processors
- D. Consumers
- E. Transporters

Subject Matter:

- A. Economics of quality production
- B. Economics of quality maintenance
- C. Economics of quality consumption

Methods:

- A. Individual firms
- B. Commodity groups
- C. Mass media
- D. Demonstration

Evaluation: Where possible, in terms of adjustments made and monetary effects.

Work Area: Utilization

Problem: People lack knowledge and understanding of the economic implications of new fruit and vegetable products and new or improved uses of existing products.

Objective: For people to develop an awareness of the contribution to health, welfare, and utility possible from new fruit and vegetable products and new or improved uses of existing products.

Audience: A. Marketers
B. Consumers

Subject Matter: A. Introduction of new fruit and vegetable products
B. Introduction of improved products
C. Economic and nutritional potential of existing products

Methods: A. Working with individual firms and industry groups
B. Talks
C. Mass media

Evaluation: A. Number of firms introducing new products
B. Product changes made by firms

Work Area: Market Structure

Problem: Lack of knowledge and understanding by marketers of fruits and vegetables of the present market structure, implications of trends that indicate change in the market structure, and opportunities and problems presented by a changing market structure.

Objective: For marketers of fruits and vegetables to make rapid adjustments in their operations as a result of a changed market structure, and to seek ways to change the market structure so as to provide a better climate for the continuance of their business.

Audience: Fruit and vegetable marketers

Subject Matter: A. Feasibility of processing products different from those presently processed by a particular firm.
B. Implications of expansion by firms through various expansion devices.

Methods: Individual firm managers

Evaluation: Number of plants making changes in structure and, if possible, economic implications of these changes.

Work Area: Miscellaneous

Problem: Fruit and vegetable marketers lack adequate and timely information about new research, current market developments, and long-run trends within their industry.

Objective: For fruit and vegetable marketers to have adequate information for planning and decision making purposes.

Audience: A. Processors
B. General fruit and vegetable marketers

Subject Matter: A. Current research relating to processing techniques and economic analysis of these techniques.
B. Current research, news and analysis of governmental actions and programs of interest to fresh fruit and vegetable marketers.

Methods: Mass media

Evaluation: Number of persons reached with the information (net increase or decrease in the mailing list).

AMA PROJECT 2525-126

DAIRY MARKETING

ALBERT J. ORTEGO, JR.

Work Area: Management of Milk Marketing Firms

Problem: Many managers of milk marketing firms lack the knowledge and skill for analyzing operational costs within milk processing and distribution plants. It is difficult to locate areas of operational inefficiency without a knowledge of these costs.

Objective: For managers of milk marketing firms to apply greater knowledge and skill to management procedures and operations, which will contribute to improved efficiency of business operations.

Audience: Managers of milk marketing firms.

Subject Matter:

- A. Business management principles
- B. Plant layout
- C. Equipment selection and arrangement

Methods:

- A. Evaluation of alternative plant layouts
- B. Individual firm assistance
- C. Dairy plant managers workshop

Evaluation:

- A. Adoption of recommended methods and techniques by milk processing plants.
- B. Reduction in the cost of specific operations because of adoption of improved methods or techniques.

Work Area: Price Analysis

Problem: Marketers of milk and dairy products lack adequate and timely information regarding price variations, supply-demand relationships, price formulation, regional and inter-regional competition, and a relationship of government programs to pricing in the dairy industry. They also lack the skill in the interpretation and application of such information to particular situations.

Objective:

- A. For persons engaged in the dairy industry to become aware of short-run price expectations and the application of these to their particular market situations.
- B. For these people to obtain a better knowledge, understanding, and skill in interpreting and utilizing price and market information.

Audience: Dairy producers, processors, distributors, and others concerned with the dairy industry.

Subject Matter:

- A. Short-run and long-run price outlook and supply-demand relationships.
- B. Statistical summaries of Virginia controlled milk market information.
- C. Impact of governmental price regulations.

Methods:

- A. Mass media releases
- B. Extension publications
- C. Talks to industry groups
- D. Workshop on milk pricing

Evaluation:

- A. Use of price analysis information in marketing decisions by industry persons.
- B. Requests for assistance in specific market and price situations.
- C. Questions and problems on workshop presentations.

Work Area: Market Structure

Problem: Failure of marketers of milk and dairy products to develop more efficient market structures and to make rapid adjustments to changes in the market structure.

Objective:

- A. For persons engaged in dairying to become aware of the importance of the market structure to the orderly flow of milk and dairy products from the producer to the consumer.
- B. For persons engaged in the dairy industry to become better skilled in evaluating the advantages and disadvantages of acquisitions, mergers, and other changes in the dairy market structure.

Audience: The dairy industry.

Subject Matter:

- A. Implications of alternative market structures for the dairy industry.
- B. The importance of adjustment to changes in the market structure.

Methods:

- A. Mass media releases
- B. Talks
- C. Individual assistance on acquisitions and mergers

Evaluation: The extent of the use of analytical tools by individual managers in considering changes in market structure.

Work Area: General Economic Education in Marketing

Problem: Many people lack the knowledge and understanding of the operation of a market price economy. Few Virginia youths are familiar with the intricacies and operations of our market price economy. They lack the knowledge of its effect on the allocation of resources and products among enterprizes and individuals, respectively.

Objective:

- A. For Virginia youths to acquire a greater understanding of the complexities and operation of our free enterprize system.
- B. For these youths to obtain a greater awareness of the interdependence among the various segments of the agricultural industry and the entire economy.

Audience: 4-H Club Members

Subject Matter: The operation of a free enterprize economy.

Methods: Illustrated lecture.

Evaluation: Specific questions before and after lecture series.

AMA PROJECT 2525-24

CONSUMER EDUCATION RELATING TO FARM PRODUCTS

DON L. LONG

Submitted 10/6/63

Work Area: General Economic Education in Marketing

Problem: Few Virginia people have had formal training in economics. Few Virginia youths have an opportunity to become familiar with the intricacies and inner workings of our market system prior to their first job seeking.

As a result, they lack knowledge about economics and our marketing system as they affect everyday living.

- Objectives:
- A. For Virginia people to obtain a greater understanding of and ability to apply economic principles in their daily living.
 - B. For Virginia people to obtain a greater understanding of the workings, functions and benefits derived through our agricultural marketing system.

Audience: All Virginia people

- Subject Matter:
- A. Economic principles as they apply to everyday living.
 - B. The functions, operation and intricacies of our agricultural marketing system and the benefits to the people of Virginia.

- Methods:
- A. Weekly news releases issued to mass media outlets in Virginia.
 - B. Weekly radio tapes issued through the Agricultural Extension Service tape service.
 - C. 4-H Town and Country Business Clubs in selected Virginia counties.
 - D. Home Demonstration Club lessons, either agent or leader training, on some aspect of consumer economics in at least two Virginia counties.
 - E. Retailer-supplier-producer conferences, in cooperation with Virginia Retail Council.

- Evaluation:
- A. Number of papers carrying news releases.
 - B. Number of radio stations carrying the tape series.
 - C. Enrollment, attendance, and completion of 4-H project.
In addition, a formal evaluation of the extent of learning will be conducted in cooperation with the 4-H Department.

Work Area: Management of Marketing Firms

Problem: Lack of training in firm management principles.

Objective: To assist managers of Virginia marketing firms in raising their level of firm management to a stage comparable with that of managers in competing areas.

Audience: Officials of Virginia marketing firms.

Subject Matter: Principles of firm management such as planning, organizing, directing, coordinating, and controlling.

Methods of analyzing individual firm operations.

Procedures for adoption of improved management techniques.

- Methods:
- A. Participate in firm management workshops with personnel of the Department of Agricultural Economics.
 - B. Demonstration of how a firm management team operates, in cooperation with a cooperative grocery warehouse,
 - C. Long-range planning demonstration for retail grocery stores involving store location, sales planning, and facilities planning, in cooperation with a cooperative grocery warehouse.

Evaluation: Evaluation will be in terms of whether firms adopt the firm management principles demonstrated and number of times they are utilized.

Work Area: Utilization

Problem: Lack of knowledge by producers and marketers of Virginia agricultural products of the whats, whens, hows, and whys of consumer behavior.

Objective: For producers and marketers of agricultural products to better analyze consumption patterns and consumer behavior and relate the findings to specific agricultural commodities and industries that they may more efficiently plan their operations.

Subject Matter: Results of consumer preference, acceptance, motivation, and behavior research.

Methods:

- A. Articles in trade organs and mass media.
- B. Case studies concerning consumer behavior toward specific products or marketing practices.
- C. In-store demonstrations of consumer behavior, preference, and acceptance.
- D. Assisting producer and marketing groups in the procurement and analyzation of information on consumer attitudes about specific agricultural products and marketing practices.

Evaluation: Acceptance and adoption by the trade of the results of case studies and in-store demonstrations.

Work Area: Price Analysis

Problem: Virginia consumers lack timely and adequate information regarding price variations, supply-demand relationships, price formulation, and competitive forces in the pricing of agricultural products. They also lack the skill in the interpretation and application of such information as they already possess to present buying decisions.

Objective: For Virginia people to obtain a better knowledge and understanding of our price making system and to obtain the skills in making improved interpretations and utilization of this knowledge.

Audience: All Virginia people

Subject Matter: A. Supply-demand relationships
B. Price making factors
C. Outlook information

Methods: A. Mass media releases
B. Home Demonstration Clubs
C. Talks to groups
D. Extension publications

Evaluation: A. Number of newspapers carrying news releases
B. Number of radio stations carrying tapes

VIRGINIA AGRICULTURAL EXTENSION SERVICE

ANNUAL NARRATIVE REPORT

PROJECT IV

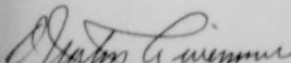
MARKETING AND UTILIZATION OF AGRICULTURAL PRODUCTS

January 1, 1963 - December 31, 1963

NAME	TITLE
Cooler, F. W. ✓	Associate Extension Food Technologist
Denison, L. L.	Assistant Extension Agricultural Economist
Engel, R. W.	Head, Dept. of Biochemistry and Nutrition
✓ Glass, M. R.	Assistant Extension Agricultural Economist
Jenkins, R. P.	Assistant Extension Agricultural Economist
Livermore, D. U. ✓	Agricultural Economist
✓ Long, D. L.	Associate Extension Agricultural Economist
Love, H. M.	Agricultural Economist
Luckham, W. R.	Associate Extension Agricultural Economist
Nageotte, G. J.	Associate Extension Dairy Specialist
Ortego, A. J., Jr.	Assistant Extension Agricultural Economist
Williamson, K. C.	Extension Livestock Specialist

Date Approved 2/11, 1964

Signed


Chairman, Project IV

Date Approved Feb. 12, 1964

Signed


State Director of Extension

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PROJECT IV
MARKETING AND UTILIZATION

Phase: General Economic Education and Marketing

I. OBJECTIVES:

Program Objective: For people to acquire a knowledge and understanding of our market price economy and skill in its application to every-day living.

Teaching Objective: For people to acquire a better understanding and knowledge of our market economy and to acquire greater skill in the application of economic principles to their individual situations.

II. SUMMARY OF PROGRESS

Outlook: All Extension personnel have uses for economic situation and outlook. They incorporate the material in their plans for programs and teaching materials. The January conference for Extension administrative, supervisory, and specialist staff, both men and women, was devoted to outlook for the general economy, the national and state farm economy, farm policy, farm management, international trade and the Common Market, employment, home economics, and the details of outlook for several important commodities in the state. This year a panel was also provided to discuss adjustments in Extension work arising from adjustments in agriculture. Adjustment topics included the Role of V.P.I. in Virginia's Agriculture; Extension work with RAD; Population Trends; Farm Management, Marketing, and Home Economics. Following the general staff meeting, the AMA specialists conducted commodity seminars with staff members of the several production departments where outlook and farm adjustments were considered in full detail. The conference program was developed by the AMA Poultry and Egg Marketing Specialist.

An outlook panel was organized for the annual Bankers Farm Credit Conference at Natural Bridge by the Chairman of the Agricultural Economics Department and the AMA Poultry Specialist. Following a discussion of the general economy by the Public Affairs Specialist, the AMA Poultry, Livestock, and Fruit and Vegetable Specialists, and Dairy Research Specialist discussed long term industry trends, changes in market structure, and marketing implications for their respective industries.

During the year, five issues of Virginia Farm Economics were published. In each issue, a section was devoted to a discussion of the general economy with special reference to several tables of economic indicators. The Project Leader, in cooperation with the Public Affairs Specialist, is responsible for preparation of these articles. The AMA Livestock Specialist has also contributed outlook material for this publication during the past year. The circulation of this publication is 7,000. The November issue of Virginia Farm Economics was devoted entirely to outlook. Nearly all research and resident teachers on the staff of the Department of Agricultural Economics contributed to this outlook issue working jointly with specialists in Projects III, IV and VII. The publication was distributed widely by county agents in addition to the usual mailing list.

A by-line series of articles by the AMA Livestock Specialist on the outlook for hogs was published in the Virginia-Carolina Peanut News which is widely circulated in the peanut belt of both states.

An Evaluation of Extension Outlook Work: Under the leadership of the AMA Poultry Marketing Specialist, all Project IV Economists jointly developed plans for improved and additional means for dissemination of outlook material in a more timely and comprehensive manner through Virginia Farm Economics, and

some special circulars. More joint consideration in the preparation of outlook material among Project III and Project IV Specialists is expected to result. Part of this program planning for better outlook work was placed on the agenda for consideration by a panel before the total Extension staff for the January, 1964 Staff Meeting. The evaluation of outlook generally by the total Extension staff indicated a concensus that outlook work should be continued; however, greater flexibility in ways and means of disseminating outlook, more localization, and more inter-departmental cooperation in the preparation of outlook materials would be in order. Plans were developed and later put into effect for revising outlook work, along the lines suggested by the staff evaluation, to become effective in 1964. More orientation of outlook toward the needs of agricultural business firms was thought desirable.

Generous assistance was again provided by members of the economics research and teaching staff in scheduling the analysis and preparation of outlook material for 1964, and in providing editorial assistance in 1963.

In summary, a special effort by Extension Service was made in 1963 to evaluate the usefulness and effectiveness of the Extension outlook assignment. As a result, plans are underway for greater involvement of the total Extension staff in outlook preparation and dissemination in a more timely and systematic manner.

Five specialists attended the National Outlook Conference.

High School Students: The AMA Fruit and Vegetable Marketing Specialist addressed 40 high school juniors and seniors in Madison County on the

topic of Comparative Economic Systems.

4-H Program: The AMA Dairy Marketing Specialist taught a class of ninety 4-H club members on the topic of Foreign Trade with emphasis on the Common Market.

The AMA Specialist in Poultry Marketing has cooperated with the Poultry 4-H specialist in developing the marketing phase of a pilot 4-H club project. This project is designed to provide 4-H club members with a broader insight to the non-production phases of the poultry industry.

The 4-H Town and Country Business Projects: This has been conducted on a pilot basis for two years. The AMA Consumer Education Specialist has cooperated with Mr. Russell and Dr. Slayton of the 4-H Department in working with twelve counties. Dr. Slayton and Specialist are now attempting to evaluate the progress and value of the project and assess its future in Virginia. Visits have been made to six counties for this purpose.

Home Demonstration Leader Training: One lesson was taught to approximately thirty home demonstration leaders in Augusta County by the AMA Consumer Education Specialist. The topic was "Getting the Most for Your Food Dollar." Evaluation in terms of interest expressed and questions asked indicated a successful lesson.

Consumer Education: Eight radii tapes (and subsequent news releases) were prepared by the AMA Consumer Education Specialist on topics concerned with general economic education in marketing. For example, some topics were: "Cost vs. Convenience," "Convenience," "A Penny Saved," and "Service, Service,

Service." While evaluation of the effectiveness of the radio and news releases is a function of the information specialists, inquiries by agents and others as to when the series would be reinstated indicate that they are well received.

The AMA Poultry Specialist has also prepared several radio tapes and news releases designed to acquaint the consuming public of changes in the poultry marketing field and their impact on the general public. Several meetings and discussions with industry groups have also presented an opportunity to discuss some of the implications arising out of changes in the structure and marketing practices of the poultry industry.

Project IV Personnel:

L. L. Denison (AMA)	D. L. Long (AMA)
Max Glass	H. M. Love
R. P. Jenkins (AMA)	W. R. Luckham (AMA)
D. U. Livermore	A. J. Ortego (AMA)

Other Extension Project Personnel Cooperating:

JoAnne Barton	W. W. Lewis
Lucy Blake	K. E. Loope
George Blume	Curtis Mast
G. H. Clark	Gene McMurtry
P. H. DeHart	Ocie O'Brien
M. F. Ellmore	R. K. Reynolds
L. W. Feddema (resigned)	H. A. Rollins, Jr.
Amelia Fuller	George Russell
C. E. Howes	Aubrey R. Slayton
M. P. Lacy	Harold Walker

Experiment Station and Resident Teaching Personnel Cooperating:

D. D. Badger	P. H. Hoepner
J. T. Buck	J. M. Johnson
R. L. Chambliss	M. E. Jullerat
W. L. Gibson	R. G. Kline

A. J. Wairath

Phase: Market Structure

I. OBJECTIVES:

Program Objectives: For the industry of agriculture to make rapid adjustments to changes in market structure, and to develop market structures which will contribute to a more orderly and efficient marketing system.

Teaching Objective: For persons engaged in the agricultural industry to become aware of changes in market structure and their impact on production and marketing of farm products; for people to evaluate alternative structures and select feasible courses of action.

II. SUMMARY OF PROGRESS

AMA Poultry: During the reporting year the poultry industry, through the Virginia State Poultry Federation, set up a number of committees to study various facets of the Virginia poultry industry, and to make recommendations that would enhance a more favorable competitive position. An overall Poultry Industry Evaluation Committee was also formed to evaluate the industry in terms of its market structure, strengths and weaknesses, and costs of operation. In addition, this committee was charged with the responsibility of coordinating the work of the other committees and integrating their reports into the overall evaluation regarding present and future opportunities. The AMA Poultry Specialist and the poultry research specialist were named to the committee and given prime responsibility for developing suitable questionnaires or survey schedules for each major segment of the industry. The Specialist and research counterpart were also responsible for the analysis and interpretation of the data to be obtained from the industry. This work is in the preliminary stages, with the final questionnaires almost ready for distribution to the industry.

Market structure has also been the subject of discussion by the AMA Poultry Specialist with several industry groups and in conferences with industry leaders. Of prime importance were the direction that the industry should take, and the probable effects upon the individual segments of the industry as a result of that action. No major changes in market structure have occurred in Virginia as a direct result of these discussions at this time. However, several firms are seriously considering formally or informally merging their operations or establishing joint ventures. Many firms await the completion of the total industry evaluation before firmly committing themselves to action.

The AMA Poultry Specialist, at the request of the Southern States Cooperative poultry processing and marketing plant at Troutville, Virginia, analyzed their broiler production and contracting operations. A report was prepared and presented to the local management. This report indicated that the returns to the producer, under their existing joint venture type of contract, were insufficient to encourage greater local production. The lack of local production was one of the major problems facing the plant management as they had to travel long distances to procure the product to keep the plant in operation.

This plant has recently been closed down, primarily due to excessive costs associated with the lack of sufficient local volume of broilers being produced.

AMA Dairy: Work in this area by the AMA Dairy Marketing Specialist was related primarily to governmental regulations for marketing milk. Considerable time was spent on analysis, preparation, and discussion of

recommendations for updating the Virginia State Milk Commission regulations. These recommendations were discussed with a committee from the Virginia State Dairymen's Association and the executive officer of the Milk Commission. These recommended changes are presently being studied by a group of leaders of Virginia's dairy industry.

An analysis of the impact of proposed national legislation relative to milk marketing was presented by the AMA Specialist to the 1963 Virginia Dairy Fieldmen's Conference, held at V.P.I. This paper emphasized both price and market structures and the changes which the enactment of specific proposals would have on such structures. The paper was mimeographed and distributed to the 80 members of the Dairy Fieldmen's Association and to all county extension agents.

A paper on market power was also prepared and presented to the annual meeting of the Virginia State Dairymen's Association. This paper emphasized the importance of a balance of power in the market place for the proper operation of the pricing system and for the distribution of returns to each according to their contribution.

The AMA Specialist discussed the Washington milk marketing order provisions relative to movement of milk with a cooperative manager, milk processor, and the market administrator to clarify requirements for physical movement of milk in order to be eligible for pooling.

Assistance was provided by the AMA Specialist to a marketing association relative to the pooling of milk in the Tidewater market. To insure the equitable distribution of Class I sales to assigned bases, it was necessary to establish provisions for marketwide pooling. Two radio tapes were made on market structure during 1963.

AMA Livestock: The AMA Livestock and Meat Marketing Specialist conducted a study of the feasibility of a livestock auction market at Farmville. Data on numbers and class of livestock in the trade area, location of competing auctions, and amount, capital and volume of livestock required for a successful auction market were presented to a group of local businessmen. The analysis indicated that it would be difficult to establish a very large market. As of now, a new market has not been established.

Non-AMA Livestock: Incorporation procedures and business operating methods were explained by the non-AMA Livestock Marketing Specialist to two new livestock marketing associations organized to assemble livestock of a specific kind and quality and sold through special auction sales.

Extension personnel, working with county livestock committees and marketing groups, analyzed old marketing methods and identified problem areas. Through group meetings Extension personnel outlined alternative marketing procedures that might alleviate the problems.

Advice was given on kinds of organizations, facilities needed, and organizational procedures to effectively carry on the new marketing process. Extension personnel provided the newly formed organizations information on quality and merchandising techniques to meet buyer demands.

The above considerations had application in the following cases:

An organization for marketing slaughter cattle was formed at Orange, Virginia. This organization sponsored four sales in 1963 and sold 644 head of cattle.

The cattle producers in Grayson and Carroll Counties formed a Feeder Cattle Sales Association for marketing feeder cattle. This organization held three yearling sales in 1963 and sold 2,144 head of cattle for their producer members. This organization plans to sponsor

a feeder calf sale in 1964 in addition to their yearling sales.

Extension personnel provided three established organizations information on quality and merchandising techniques for sponsoring summer yearling feeder cattle sales. One sale was held at each of three locations with 3,175 head sold. Indications are that these summer sales will expand and lead the way for improved production practices with yearling cattle.

AMA Fruit and Vegetables: The AMA Specialist prepared feasibility budgets for a sweet potato flaking plant for the Northampton Marketing Association. Three different sizes of sweet potato flaking plants were considered. These budgets covered plant construction and maintenance costs, raw product costs, labor and management costs, marketing costs, financial costs and depreciation schedules. Break even points were transformed into prices per pound for which the product must be sold in order to break even and to return several positive rates on the investment. These budgets were incorporated into the official report of the study committee to the association. The AMA Specialist also participated in several meetings with grower groups and county agents, to discuss the subject.

Also, the Virginia Employment Commission was furnished data on labor requirements, both quantitative and qualitative, by seasonality, for strawberry and several vegetable crops so that they could more adequately meet the labor needs of Virginia farmers.

The market structure for strawberries was discussed by the AMA Specialist in an article published in Virginia Farm Economics.

Larry Denison (AMA)
Robert P. Jenkins (AMA)
W. R. Luckham (AMA)

A. J. Ortego (AMA)
K. C. Williamson

Personnel of
Agricultural Experiment Station Cooperating:

J. T. Buck

Phase: Utilization

I. OBJECTIVES:

Program Objective: For people to acquire a greater knowledge and understanding of the economic implications of new agricultural products, new and improved uses for them, and nutritional values of food.

Teaching Objective: For people to become aware of the economic and nutritional importance of new products, new and improved uses of existing agricultural products, and be able to evaluate and utilize them.

II. SUMMARY OF PROGRESS

Food Technology: A sweet potato meeting was held at the Virginia Truck Experiment Station at which specialists presented information on new and better adapted sweet potato varieties and a demonstration of fresh and canned examples of these varieties was held. Several individual conferences were held with processors and potential processors on possibilities for, and principles of processing sweet potato flakes.

The Food Technologist received training in processing techniques of new products at the Southern Utilization Lab in New Orleans and the Eastern Utilization Lab in Philadelphia.

In cooperation with the Rural Defense Specialist, information was presented by the Food Technologist in radio tapes, on how to provide for and protect food supplies from nuclear fall-out.

Several conferences were held with processors on the effect of the food additive, corn sirup, on canned sweet potato quality. Sweetening with corn sirup was found to be cheaper than cane sugar. One processor who used it claimed he saved considerable money and produced canned sweet potatoes with a higher sheen and without changing the normal flavor.

AMA Fruit and Vegetables: AMA utilization work involved reporting recent discoveries of new products and new ways of using old products. The Specialist worked with processors on possibilities of using corn sirup and artificial sweetners in apple products during the recent sugar "shortage". Also, the owner of a tomato processing business was advised that asparagus appeared to offer some income possibilities for a person in his situation. A complete report on asparagus consumption, production, pricing and other related factors was compiled for this firm.

Dairy: The AMA Dairy Marketing Specialist and the Dairy Technology Specialist served as members of the Virginia Dairy Foods Promotion Committee, organized in October of 1962. During 1963 this committee's efforts were directed primarily to the organization of a unified statewide June Dairy Month program. The specialists assisted in the organization and programming of area committees for their June Dairy Month activities. A major activity carried throughout the state was the Dairy Foods Merchandising Contest among grocery stores. It is the general feeling of the industry that this program has been successful in promoting milk and dairy products.

In cooperation with the June Dairy Month Luncheon, held for people of the press, the specialists prepared for distribution a kit of mimeographed material on Virginia's dairy industry. Also the specialists wrote five news articles in connection with June Dairy Month.

The AMA Dairy Marketing Specialist and the Dairy Technology Specialist assisted industry organizations in their educational programs by providing information through five news articles, five talks to groups

and five radio releases. One mimeographed leaflet on making soft un-ripened cheeses in the home was prepared for rural homemakers as a means for utilizing surplus home produced milk.

No formal evaluation of these efforts has been made. However, these activities are expected to increase the use of milk and dairy products in Virginia.

AMA Consumer Education: Three radio tapes and press releases were prepared which were concerned with utilization of agricultural products. The topics were: "Those Processed Foods," "Queen for a Day," and "Foods from Far Away."

Biochemistry and Nutrition: In activities relating to environmental health and pesticide residues two publications have been completed.

- (1) Chemicals in Agriculture, Cir. 922, March, 1963, Virginia Agricultural Extension Service. Local committee for this publication consisted of R. W. Engel, Head Department of Biochemistry and Nutrition, and the following:

W. E. Chappell, Plant Pathology and Physiology Research
G. W. Litton, Head Animal Science Department
W. B. Judkins, Head, Horticulture Department
H. L. Dunton, Head, Agronomy Department
J. M. Grayson, Head, Entomology Department
G. C. Graf, Head, Dairy Science Department

- (2) Brochure for release by Governor Harrison developed by a state committee consisting of Dr. M. I. Shanholz, State Health Commission, Maurice B. Rowe, State Department of Agriculture, R. V. Davis, State Water Control Board, Chester Phelps, Commission of Game and Inland Fisheries, W. J. Hargis, Virginia Institute of Marine Research, W. B. Bell, Dean of Agriculture.

This brochure explains the interdepartmental coordination established by Governor Harrison to insure that all agencies have a voice in planned use of chemicals to control pests to insure maximum public health protection.

In activities relating to forage evaluation most of the Biochemist's time is devoted to answering inquiries from farmers and county agents, inquiries of a technical nature. There are an average of two such inquiries per week.

F. W. Cooler
R. W. Engel

G. J. Nageotte
A. J. Ortego, Jr. (AMA)
R. P. Jenkins (AMA)
Don Long (AMA)

Phase: Quality

I. OBJECTIVES

Program Objectives: For producers, marketers, and end-users to acquire and use the knowledge, skills, and equipment necessary to encourage quality production, identify it, and maintain throughout market channels the quality of products demanded by consumers.

Teaching Objectives: For producers, marketers and end-users to become aware of the need for quality production, identification, and maintenance in market channels; and to acquire and adopt associated methods and techniques.

II. SUMMARY OF PROGRESS

Food Technology: Cannerymen were given help by the Food Technologist on how to use their equipment more effectively for washing tomatoes to eliminate soil and fruit fly eggs from the canned products. Peeling demonstrations were held in tomato canneries and 255 people were shown how to remove peeling more completely with less damage to the fruit. An inspection of peeling procedures after the demonstrations as compared to those used by peelers before the demonstrations indicated that an improvement in canned tomato quality was associated with the demonstrations. Cannerymen were advised on optimum can cooking times. When feasible the processing time was actually adjusted to result in less product breakdown, with better color retention.

Fruit fly populations were checked daily during the tomato canning season, and notification given to producers and cannerymen so that control measures could be commenced. Fruit fly control practices were demonstrated on a cooperative basis with the Experiment Station tests. Al-

though fruit flies were very numerous, there were no known seizures of canned tomatoes last season due to fruit fly egg contamination.

Trials were conducted by the Food Technologist in cooperation with the Experiment Station to determine the suitability of nine newly developed tomato lines and twenty sweet potato lines for processing.

These lines were evaluated for percent recovery, color, uniformity, wholeness, flavor, texture and nutritive value.

Survey of maple sap collecting and concentrating equipment used in the Highland county maple industry was made by the Food Technologist in cooperation with the county agent. Conferences were held with maple sirup authorities at the Eastern Regional Utilization Lab in Philadelphia on instruments for quality measurement and improved methods and equipment for concentrating sirup.

A green bean processor was given help on a bean discoloration problem which was adversely affecting the appearance and USDA Grade of the frozen beans. In cooperation with the Experiment Station, factors associated with the brown end discoloration problem were determined and means were developed for minimizing or eliminating the problem.

Dairy Technology: Assistance was given by the Dairy Technologist to five dairy plants on quality problems associated with cottage cheese making, formulation of cottage cheese dressing, procedures for making sour cream, ingredients for ice cream, ice milk formulas, and laboratory control.

The Technologist, in cooperation with the Virginia Dairy Fieldmen's Association, organized and conducted a two day Dairy Fieldmen's Conference on problems related to the procurement and maintenance of high

quality milk supplies for dairy plants. Approximately 85 dairy plant fieldmen attended this conference.

Four radio tapes and five news releases were presented on subjects related to control and maintenance of quality milk and dairy products. Three talks were presented to groups of dairymen on methods for producing high quality milk.

Considerable time of the Technologist was spent, in cooperation with the Virginia Mastitis Prevention and Control Program, in the development of subject matter materials on dairy herd management and managed milking in an effort to reduce the incidence of mastitis in Virginia dairy herds and to increase the quality of milk by eliminating abnormal milk and antibiotics from the milk supply. The Technologist designed a Herd Management Calendar to be used as a constant reminder for dairymen to apply those practices known to be effective in maintaining good herd health and milk quality. Ten thousand of these calendars have been distributed to dairymen throughout the state of Virginia.

Assistance on the District and County level was given to organizing and conducting a number of managed milking demonstrations for the purpose of promoting better practices that will result in fewer cases of mastitis, high quality milk production, and low incidence of milk adulteration with antibiotics..

Considerable time of the Technologist was spent in cooperation with members of the Virginia Mastitis Prevention and Control Committee in planning and organizing a mastitis screening test program and the development of subject matter materials that will support the program. The purpose of this testing program is to eliminate the marketing of abnormal

milk produced by cows that are infected with mastitis.

The Technologist, in cooperation with the V.P.I. Dairy Technology Staff, the V.P.I. Department of Bacteriology, and the State Department of Health, organized and conducted a five-day training school for 18 health sanitarians whose main assignment is to inspect and supervise quality processing of milk and milk products in Virginia dairy plants. Evaluation of the short course by written examinations proved the short course to be a success. The sanitarians also expressed a desire for additional short courses.

AMA Poultry: The AMA Poultry and Egg Marketing Specialist in cooperation with the egg production specialist presented information and participated in discussions concerning egg grades and quality standards. These dealt with the proposed changes in the national standards, and in changes that would make the standards more realistic in reflecting consumer attitudes and values. These proposed changes were submitted through the state egg grading and egg law inspection departments to the Federal Egg Grading and Inspection Service. However, no action was taken.

The identification and maintenance of egg qualities acceptable to the retail outlets and to their customers continues to be a problem. Frequently, there is a considerable difference in actual quality of eggs sold under any one grade designation. For example, Grade AA eggs in California fell well within the Grade A range in Virginia. Also, retail outlets appear unable to deliver to consumers eggs that measure up to their purchasing specifications. There appears to be a need for more uniformity in our grading standards. These standards should be

designed to yield an acceptable product at the consumer level. This also suggests that major emphasis on inspection should be at the retail level, rather than at the processing level.

The present marketing structure in the egg industry is tending to impede progress - especially for those firms unable to support a full time federal-state grader.

Non-AMA Livestock: Through informal surveys, personal contact, observations at the sales and analyzing sale results, county agents and specialists accumulate information on the quality of livestock and wool desired by buyers. The specialists and county agents presented this information at local and state meetings of the sale groups. This information was also used in preparation of circulars for distribution through county extension offices.

During 1963 the Marketing Specialist advised with a special committee of the Virginia Beef Cattle Association in conducting a survey of approximately 300 feeder calf buyers on health problems of calves during the marketing process. In addition to the buyers, several county agents and producers in Virginia were surveyed on suggested procedures pertaining to the health of feeder calves during the marketing process. As a result of these surveys the Health Committee of the Virginia Beef Cattle Association is revising the requirements on health to consign calves to Virginia Feeder Calf Sales.

The Marketing Specialist, in cooperation with the Extension Veterinarian, worked up a list of suggested management practices that are recommended to assist in reducing the incidence of shipping fever.

This was distributed to sellers and buyers through the county extension agents.

The Marketing Specialist assisted Virginia Department of Agriculture personnel and Virginia beef cattle industry leaders in revising and re-writing the standards used for feeder calf and feeder cattle grades.

The Specialist assisted in training State Department of Agriculture graders at two training sessions held in 1963. Information on the percentages of the various grades of feeder cattle and the comparative performance of the individual graders was analyzed. The acceptance by buyers of the grade standards used was discussed and changes made in the application of the grades where there appeared to be a real need.

AMA Fruit and Vegetables: ^{cannery} Tomato/production data were analyzed by the AMA Specialist to determine relationships between raw product quality, canning practices, and the quality of the canned product. This work was aimed at increasing the price for good processing tomatoes, thus encouraging an improvement in the quality available to the processor. Several reports on these data were published.

A circular on sweet potatoes handling was prepared and distributed to producers, handlers, and others interested in the sweet potato industry. The theme of this circular was better handling to prevent bruising.

A new post harvest chemical treatment to prevent decay and rot in sweet potatoes during marketing was explained by personal visits to sweet potato packing sheds, Extension publications, and mass media. This treatment has been adopted by the Virginia sweet potato industry

and has resulted in a greater acceptance of Virginia sweet potatoes in the market place.

In a cooperative project with J. M. Johnson, C. B. Wood, and Anthony Lopez of the Virginia Agricultural Experiment Station, apple processors were encouraged to modify their pricing procedure to more adequately reflect the quality of raw products received, and more adequately reward high quality producers. The Extension work was based on the results of a nine-season joint research project by the Agricultural Economics and Horticulture Departments entitled "The Effects of Size and Quality on the Value of Apples for Processing." Pricing and procurement policies recommended would encourage delivery of a better quality product by apple growers, and lower processing costs. Processors representing over 50 percent of the U. S. apple processing volume participated in a meeting the AMA Specialist arranged in Winchester. Other methods of Extension include personal contact with major processors from six states as well as talks before grower and processor groups and contacts with Extension specialists in other states. The excellent cooperation of the Extension Food Technologist has also been invaluable. Mass media articles in several popular and professional magazines were presented. The processors paid the same price for table sort apples from some growers this year as for comparable quality tree-run fruit as a result of this work. In the past, table sort apples had been purchased at a lower price. Also, several plants are considering the adoption of the proposed system. One plant purchased on the basis of this system during two seasons. Excellent cooperation has been received from J. M. Johnson, C. B. Wood,

and Anthony Lopez of the Virginia Agricultural Experiment Station on the Extension phase of this project.

An attempt to determine vegetables suitable for production in Southwest Virginia involved the consideration of securing sufficient quantities to interest a buyer in establishing a buying station in the area. Problems in locating potential buyers were identified.

F. W. Cooler

R. P. Jenkins (AMA)

W. R. Luckham (AMA)

G. J. Nageotte

K. C. Williamson

Experiment Station Personnel Cooperating:

J. M. Johnson

Anthony Lopez

C. B. Wood

Phase: Price Analysis

I. OBJECTIVES:

Program Objective: For marketers to accept and use adequate and timely information on price variations, supply-demand relationships, price formulation, competition, forecasts, and the impact of government programs in planning and operating their businesses.

Teaching Objectives: For marketers (1) to become aware of the importance and need for price and market evaluation in planning and operating their businesses; (2) to improve the skill of marketers for evaluating the impact of price changes and market forecasts on the economy and their businesses; (3) to apply price information in planning and operating their businesses.

II. SUMMARY OF PROGRESS

AMA Poultry and Eggs: Specific price analyses have been made by the AMA Specialist on broiler and egg prices as reported in the state, in an effort to provide more realistic information for decision making purposes. Existing egg price series do not reflect the price information needed by commercial egg producers, egg processors, or by hatching egg producers. The series is often misunderstood because its components are not identified. A price series reflecting prices paid by commercial egg grading stations (reflecting quality and quantity differentials) would be of assistance to commercial poultrymen.

Results of egg price analysis work were disseminated through outlook activities reported under General Economic Education.

AMA Dairy: Major education activity in this phase was the workshop on milk pricing held for directors and managers of dairy marketing cooperatives. A two-day workshop conducted by the AMA Specialist with the help of Dr. M. C. Conner, Dairy Research, was attended by 23 people including a county agent from each of six Extension districts. The workshop was co-sponsored by the Virginia Council of Farmer Cooperatives. Evaluation of this workshop indicated that while some improvements could be made in the presentation, method of presentation, and the topic emphasis, the workshop was successful. The Specialist feels that such a workshop could prove beneficial, if shortened, on a local basis in those areas where dairying is important.

The supply-demand situation in the 28 milk markets under control of the Milk Commission was analyzed and published in the 1962 Milk Market Summaries.

The outlook for milk supplies, prices, and sales was presented as previously described under the phase, General Economic Education. One news article updating the situation was published. Three radio tapes dealing with milk price analysis were made during the year.

Assistance was given by the AMA Specialist to the manager of a marketing cooperative in the analysis and preparation of testimony relative to the effect of market order changes on the pricing of milk in Southwestern Virginia. This analysis dealt primarily with the amending of the order required as a result of the Supreme Court decision invalidating the type of compensatory payment previously in that order.

The specialist also served on the program committee for the

Agricultural Policy Institute at North Carolina State College. This committee planned a program on milk pricing policy to be held at Ashland, North Carolina, in October. This policy forum was the first forum to be held on an individual commodity basis, directed primarily toward problems facing the dairy industry in the Southeastern states. The conference was attended by the Chairman of the Department of Agricultural Economics.

Seed Crops: A supply and demand analysis on seed crops was prepared by the Business Management Specialist for inclusion in the outlook work reported under General Economic Education. Mr. R. L. Chambliss, Agricultural Experiment Station, assisted with this analysis.

AMA Livestock: Under the AMA Livestock and Meat Marketing Project, livestock price analyses were prepared by the Specialist and kept up to date as new information became available. The results of these studies were disseminated through press, radio, special articles and letters in connection with the outlook work described under the phase General Economic Education in Marketing. Also, an outlook newsletter to farm management county agents was initiated.

An article analyzing recent changes in hog prices, seasonality, and in the fall and spring pig crops was published in Virginia Farm Economics and in Virginia-Carolina Peanut News.

Non-AMA Livestock: The results of special sale programs were analyzed for price comparisons with other market outlets, price by sex, value of certain quality aspects, value of changes in merchandising techniques and other factors. This information was discussed with producers and

marketers at county meetings, area and state meetings by the specialist and county agents. It was also distributed to producers and marketers by the specialist and county agents through newspapers, magazines, radio, and television.

High speed computers were used to analyze results of the special sales over a ten year period. Through the use of these computers detailed analysis could be made. The results were distributed to producers through meetings and county extension agents, so that producers might have more complete information when making decisions on enterprise selection, production practices and preparing their livestock and livestock products for market in accordance with market demands.

The lists of buyers and what they purchased at the special sales was analyzed for location, specific needs and buying habits. This information was presented to producers and marketers by the specialist and county agents at meetings of sale groups, annual meetings, and discussed with state and regional sale committees.

Larry Denison (AMA)
Max Glass
H. M. Love

W. R. Luckham (AMA)
A. J. Ortega, Jr. (AMA)
K. C. Williamson

Experiment Station Personnel Cooperating:

R. L. Chambliss

Other Extension Project Personnel Cooperating:

G. A. Allen
J. H. Carter
Role Godsey

Phase: Assembly of Agriculture Products

I. OBJECTIVES

Program Objective: For marketers to adopt new techniques, methods, and facilities that will result in increased efficiency in assembling and selling farm products.

Teaching Objective: For producers and marketers to become aware of the need for increasing volume and efficiency in the assembly and sale process; and to develop the knowledge and skill necessary for adoption of improved methods.

II. SUMMARY OF PROGRESS

Non-AMA Livestock: The marketing program for assembling large volumes of a specific kind and quality of livestock for sale at auction was expanded in 1963. The sales were sponsored by 59 county or area producer organizations. In addition to the local organizations, there is a State Beef Cattle Association and a State Feeder Pig Association which carry on most of the promotional and advertising activities for the local sale groups.

Practically all of these sales were held at the local livestock auction markets and in cooperation with the market operator. All of the livestock sold through these sales were graded by specially trained personnel employed by the Virginia Department of Agriculture.

The Non-AMA Specialist and county extension agents worked with these assembly and sales organizations in the following ways:

1. Developing and training leaders so they may carry out the organizational and management responsibilities of the sale programs.

2. Gathering information and informing the sale organizations on trends in livestock production, marketing and use, and the consequent changes in the marketing process needed to meet these trends.
3. Through demonstrations, extension personnel provided the opportunity for sellers, buyers, and marketing personnel to become familiar with the grades and the factors distinguishing the grades.
4. By working with the organizations and various committees encouraged improved communications between sellers, market agencies, transporters, and buyers so that each may know and appreciate some of the problems of the other. This is creating an atmosphere in which adjustments to changing conditions can take place more rapidly.
5. Extension is also keeping research personnel informed on marketing, health, and transportation problems needing research and stimulating the conducting of research projects which will aid in more efficient marketing of livestock and livestock products.

In 1963 the 59 producer groups sponsored the following special sales:

8 Spring Feeder Cattle Sales	7,178 Head Sold
3 Summer Feeder Cattle Sales	3,175 Head Sold
34 Fall Feeder Calf Sales	37,420 Head Sold
20 Fall Yearling Feeder Cattle Sales	17,630 Head Sold
16 Slaughter Cattle Sales	3,138 Head Sold
<u>53 Feeder Pig Sales</u>	<u>48,542 Head Sold</u>
134 Livestock Sales	117,083 Head Sold
3 Wool Sales	1,329,548 Pounds

In comparison to 1962 this is 26 additional sales for live animals and an increase of 12,515 head sold.

It is estimated that producers receive at least \$10.00 premium per head by selling cattle through special graded producer sponsored sales. Based on the 68,541 head sold, the consignors to these sales received \$685,410 more than they would have if these sales had not been available. Feeder pig producers estimate at least \$3.50 per head price advantage in

special feeder pig sales. This price advantage on 48,542 pigs returned producers \$169,897 that they would not have received without the special producer sponsored sales.

K. C. Williamson

Other Extension Project Personnel Cooperating:

G. A. Allen
J. H. Carter
Roie Godsey

Phase: Management of Marketing Firms

I. OBJECTIVES:

Program Objective: For managers of marketing and supply firms to apply greater knowledge and skills to management procedures and to adopt new and improved techniques which will result in greater efficiency of operation.

Teaching Objectives: For managers (1) to become aware of the need to improve management and operational procedures and methods; (2) to acquire greater skill in the application of business management principles; (3) to adopt new and improved management procedures and methods that will result in greater efficiency and use of resources.

II. SUMMARY OF PROGRESS:

Poultry and Egg Marketing Specialist: The AMA Specialist has continued work with the Virginia Egg Marketers Association. The Specialist has presented information and participated in discussions designed to improve this in-plant operation and overall management effectiveness.

Work has also continued with the leaders in the poultry industry. Specific emphasis has been placed on the future of the various industries in the state, and the competitive forms of business that appear to be the most advantageous for continued business life. (This work is described under the Market Structure phase.)

The AMA Specialist has worked informally with several of the egg marketers on problems of product supply and of in-plant efficiency. Product supply appears to be one of the major factors contributing to high in-plant costs in Virginia. The Troutville poultry processing plant closed primarily because of lack of supply. Several other

marketing agencies may be in a similar position. Economical production of products, and a higher return to the producer, appear to be two factors of importance to Virginia marketing firms. The alternative is either to own production facilities in quantity, or to seek other opportunities.

The AMA Specialist cooperated with the egg production specialist and an agricultural engineer in analyzing the operation and marketing practices of the Mecklenburg Egg Corporation. A complete report, including recommendations for improving their marketing methods and procedures was submitted to the corporation members. Substantial changes have been made in their operations, but it is still too soon to make significant evaluations of their progress.

The production specialist and the AMA Specialist also made a preliminary analysis of an independently owned egg production corporation.

Dairy: Activities with dairy marketing firms constituted a joint undertaking by the AMA Dairy Marketing Specialist and the Dairy Technology Specialist.

Assistance was given to five firms. Problems considered included plant layout, equipment selection, equipment arrangement, new processing techniques, needs for improved accounting and plant feasibility analysis.

Considerable time was spent in work with Colony Farms Cooperative Dairy. Work of the AMA Specialist with this firm consisted of a management analysis of financial records, selection and layout of plant equipment, labor efficiency, and evaluation of remodeling versus building a new plant. A report to the manager and director was prepared and mailed

to the cooperative. This report was also discussed with the manager by the AMA Specialist. Additional assistance to this firm by the Dairy Technology Specialist concerned the preparation of alternative methods for processing creamline milk, homogenized milk, skim milk and cream to realize increased capacity of present processing equipment. Flow diagrams were developed and mailed to the cooperative manager along with advantages and disadvantages of the proposed alternatives.

Work with individual plants appeared effective because plants adopted changes recommended on the basis of the various analyses. These changes have resulted in increased labor productivity, better work methods, greater efficiency of equipment use, improved equipment arrangement and greater knowledge of operational efficiencies.

A Dairy Plant Management Conference was organized and conducted in cooperation with the Educational Committee of the Virginia Dairy Products Association. Topics were presented on subjects related to business management, labor-management relations, effects of nuclear fall-out, dairy products promotion, public relations and possible effects of proposed dairy legislation. From expressions of those in attendance, the conference was deemed a success. One of the topics will be presented again at the annual convention of the Virginia Dairy Products Association in January, 1964.

A workshop on milk route profitability was held in cooperation with the University of Maryland, Pennsylvania State University, and Cornell University. Plant managers were invited from Maryland and Virginia. Instructors were from Pennsylvania State and Cornell. Seven plant representatives from Virginia participated in this workshop. Follow-up on

this workshop showed that at least two of the participants were using the methods and procedures demonstrated during the workshop.

An analysis was made for an individual and a group of dairymen on the feasibility of bottling their own milk production. The complete analysis was presented to the group of dairymen in Charlotte County. This will be useful to them in determining costs and returns from such a venture.

AMA Livestock and Meat: Work with a slaughtering plant was continued by the AMA Specialist. A system of record keeping for the sales department was developed. This system enabled management to determine the profits returned by each salesman, to better allocate advertising, and to determine profits on a weekly basis. Management should be able to make better decisions on the basis of the information from the improved records system.

AMA Fruit and Vegetables: The manager of a tomato marketing firm in Rockbridge County was assisted by the AMA Fruit and Vegetable Specialist in evaluating the profitability of shipping tomatoes from Virginia to the New England states. Budgets which were prepared showed that the price differential was considerably more than transportation costs. A study of the market in New England, however, led to the conclusion that many tomatoes in New England were sold at roadside markets which would not be available to this shipper. Since statistics showed that New York prices were about like Virginia's and yet New York tomatoes did not move to the adjoining New England states, thus equalizing prices, the firm was advised to secure a market in New England before making

plans to ship tomatoes.

The AMA Specialist presented educational material to an apple producer who wished to establish a roadside market in Amherst County. Plans for this facility were provided along with economic and physical requirements. Roadside marketing principles were also reviewed with this producer. This market is now operating year around and the grower's income position has improved. A report of this study was published as "An Economic Analysis of Establishing a Roadside Market" and made available to all county agents as a source of information on roadside market establishment and feasibility. Based on experience gained in this and other roadside marketing contacts, a bulletin for managers on roadside marketing principles is now in process. News and radio media were also used to disseminate information on roadside marketing.

A strawberry marketing cooperative was furnished information by the AMA Specialist on the Perishable Agriculture Commodities Act. Failure to fully understand the provisions of PACA had led to administrative inquiries by the PACA authority. By contacting PACA personnel and reviewing the exact requirements of the law, a satisfactory solution was found to the compliance problem. Since other marketers in the state might be experiencing similar difficulties, a paper on the PACA, together with information from the agency and a license application form, was distributed to county agents for reference to firms. The Virginia Processor also reprinted the paper for distribution to processors. The cooperative was also assisted in marketing strawberries. The marketing agencies involved were reviewed and sources of information, such as the Blue and Red books, were shown to be aids in locating local markets that might

use strawberries. An analysis of the market potential of areas located adjacent to the production area was also made. An article on strawberry marketing, which evaluated potential U. S. markets, was published in Virginia Farm Economics.

In the 1962 annual report of the AMA Fruit and Vegetable Marketing Specialist, management studies with the Big Seven Canning Company of Southwest Virginia were reported.

This company was financed by the Area Redevelopment Administration in conjunction with local farmers and businessmen. Its purposes were to improve the apple market in Southwest Virginia, to offer an additional source of income to the area through processing of local tomato production, and to provide industrial employment for local people. This organization has now ceased operation. This outcome might have been prevented by better planning and orientation before the project was begun.

Management in the Board of Directors was split approximately into thirds: one third local growers, one third local businessmen, and one third plant management. Of the \$100,000 of capital investment, there was only \$1,500 of operating capital. This amount was insufficient to pay even the hired labor for the first season. This proved to be an effective restraint to successful management action.

Also, growers insisted on a higher price for their apples than the company could profitably pay. Since growers and local businessmen had two thirds of the management vote on the Board, a coalition of these groups left the manager powerless to adjust price.

There was little technical knowledge in the area about tomato production, or any production equipment available in the area.

Hence, the quality of tomatoes was poor and returns to growers were correspondingly low, proving a strong deterrent to tomato production.

Hence, the plant at no time had an adequate supply of tomatoes.

Thus with very limited operating capital, a conflict of interest on the Board, and a lack of raw product, the company was powerless to prevent excessive losses. However, with proper planning and orientation, the company might have been organized to allow management effective control and the local people might have been instructed in the possibilities, limitations, and feasibility of such a venture.

Food Technology: It was called to the attention of a green bean processor that his size grading equipment was doing a rather poor job due to inadequate design which depended upon a man continually beating a rotating reel with a rubber hose. A motorized reel flail seen in a bean plant in Oregon was described to the Virginia processor. He designed and had such a flail constructed and installed on the grading reel. This mechanism has replaced the full time hose wielding man and resulted in a superior grading job.

New and improved methods of processing tomatoes were advocated and in some instances their initiation was supervised. More efficient tomato peeling methods were demonstrated at three tomato canneries. At each cannery the manager and his employees were shown how they could peel more tomatoes faster, with less waste and earn more money in the process.

Four vegetable canning demonstrations were conducted to show approved preparation, processing, and warehousing practices.

Superior vegetable varieties were used in these demonstrations to allow processors to examine these varieties and thus encourage their adoption. Conferences were held with canners to discuss buying on a grade basis. Under this method prices would be related to the actual value of the raw product based on defect trim and time loss and culling loss. The Experiment Station is conducting vegetable variety trials to determine the suitability of varieties for processing; preparation loss or percent recovery is a main determining factor considered before a variety is recommended. As this information becomes available, it is disseminated to producers and canners in the bimonthly Extension publication the Virginia Processor.

The Extension Service of V.P.I. cooperated on an informal regional basis with Extension personnel of the Universities of Maryland, Rutgers, and Delaware to bring to the processors of the four states the latest research information available on processing; a workshop was also held in March for technical processing personnel and a conference in December for directors, owners and fieldmen. A total of more than 1,000 persons attended these sessions. The Experiment Station of V.P.I. sponsored four and the Extension Service sponsored four staff members to participate in these meetings held in Baltimore, Maryland.

AMA Consumer Education: Prior to year's leave of absence, the AMA Consumer Education Specialist worked with several food retail firms concerning consumer attitudes and habits. Partisly as a result of this, one of the major food wholesale cooperatives of Virginia requested assistance on a problem of retail store site evaluation. This was tabled during

the leave of absence. Considerable time has been spent on the problem since work was resumed in Consumer Education. Mr. Norwood, FES, USDA, spent a day with the Specialist on this problem.

In addition to this, assistance was given to a retailer who was planning a new store. While no formal recommendations for layout and operation were presented, several suggestions were made on an informal basis.

Non-AMA Livestock: Assistance by the Non-AMA Specialist was given to Virginia livestock auction market operators in: planning and participating in the association's annual meeting in which special sale programs and their application to the weekly market operation were discussed. Personal visits were made to nine auction markets to discuss with managers improved techniques in assembling, handling and merchandising livestock. One market manager has started grading and co-mingling feeder cattle according to breed, sex, grade and in uniform weight groups without regard to ownership at his weekly auction sale. This is carried out during the heavy marketing season in the fall months and has reduced the selling time on feeder cattle to less than half the usual time. According to the market operator, buyers much prefer this system over selling by individual ownership at his weekly market. Prices reflect buyers' approval of this system.

The Specialist, with other Extension personnel, and State Department of Agriculture members, assisted two markets in establishing the Tel-auction system of selling graded lambs and veal calves. This is based on a conference telephone hook-up in which as many as ten buyers may

sit in their office, listen to the auction by telephone, and place bids with the auctioneer. Three more markets are considering assembling lambs and veal calves at their market in the usual manner but selling this livestock by Tel-o-auction from one point.

Business Management Specialist: Major activities in the area of business management with retail farm equipment businesses included assistance to individual firms, business management conference, analyzing 1962 financial statements, and preparing a bulletin based on the findings of initial research of the industry in 1960.

Individual firm assistance consisted of aiding firm managers in improving the operation of their businesses. Visits were made to two retail farm equipment businesses. In each case, the overall management program of the firm was reviewed with management. During later visits, problem areas of the firms will be delineated and improvements made where possible. Plans have been made to work more closely with these and other firms in the coming year.

The Fourth Annual Workshop on Business Management for Farm Equipment Dealers was devoted to problem identification and budgeting. The primary thesis was that analysis of financial statements would reveal specific problems within the firm. Once these problems are recognized by management, the technique of budgeting could be used to evaluate alternative solutions to the problem. The workshop was a team effort of the Agricultural Economics Extension Staff. A staff participant is preparing a topic for publication in a nationally circulated magazine. Proceedings of the conference will be published

and distributed to all retail farm equipment businesses in Virginia, county agents, and other interested persons.

The Specialist participated in the workshop conference by assisting in the planning of the workshop, by presenting a topic at the workshop, and by preparing the proceedings of the workshop.

A comparative analysis of the 1962 financial statements of those dealers participating in the 1960 study was made to determine the extent and cause of change. The results will also be useful to managers in comparing their individual statements to the average of several firms having similar sales volumes. Data of this nature have been found to be useful to firm managers in delineating specific firm problems. The results of the study will be made available to firms through an Extension bulletin. Also, the preliminary findings will be presented by the Specialist at the Twentieth Annual Convention of the Virginia Farm Equipment Association in early 1964. This study was initiated by Mr. A. J. Ortego.

A bulletin presenting the technical statistical analysis of the 1960 initial research project with the farm equipment industry was completed. When published, the bulletin will be distributed to all farm equipment dealers, Experiment Stations and Extension personnel within the state and throughout the nation.

A long range plan of work in the area of business management with supply firms is presently being developed. Included in the plan is a long range plan for future business management workshops.

Management of Farm Service Agencies: Assistance was given by the Specialist to managers and boards of directors of the following cooperative or semi-cooperative firms on alternative types of corporate organization, content and preparation of articles of incorporation, content and preparation of corporate bylaws, compliance procedures with respect to federal and state tax requirements, business procedures, and corporate reports: Augusta Cooperative Farm Bureau, Inc., Virginia-North Carolina Mountain Wool Association, Virginia Flue-cured Tobacco Growers Association, Virginia State Dairymen's Association, Bland County Wool Association, Winchester Feeder Pig Sales Association, Highland County Sheep and Wool Growers Association, Northern Neck Growers, Inc., Highland County Feeder Calf Sales Association, Young Farmers Club of Ivor, Virginia State Cattle Producers Association, Virginia Burley Tobacco Growers Association, Wythe County Farm Bureau Cooperative, Lynchburg Feeder Calf Producers Association, and Pilot Community Club.

The manager of Bryant Company was assisted with future business plans.

The Specialist conducted one program session of each of the five workshops sponsored by the Virginia Council of Farmer Cooperatives. Assistance was given to the Council's Executive Secretary and the Council's Education Committee in planning both the 1963 and future 1964 workshops and general educational program. Plans are underway for Extension specialists to use material from the FES Directorate Contract in the 1964 workshops. More than 300 managers and directors attended the Council's workshops in each of the past two years.

Other cooperative conferences and meetings participated in by

the Specialist included the FES Directorate Workshop at Birmingham, Alabama, Eastern Membership Relations Conference at Baltimore, Maryland, Virginia Council of Farmer Cooperatives annual meeting, Southern States Cooperative annual meeting.

The Specialist participated in the FES wholesale firm management workshop for specialists at Tulsa, Oklahoma.

Assistance was given by the Specialist to a bank and a group of Gloucester farmers on the feasibility of forming a cooperative to purchase and operate a grain elevator facility which came on the market through bank foreclosure. The group decided against it.

The Specialist assisted with planning and conducting the fourth Annual Farm Equipment Dealers' Conference. The evaluation of the conference series by dealers indicates that most of them have made constructive and profitable changes in their business planning and operations as a result of the training received at these conferences.

F. W. Cooler (AMA)
Larry L. Denison (AMA)
Max Glass
R. P. Jenkins (AMA)
D. U. Livermore

Don L. Long (AMA)
H. M. Love
W. R. Luckham (AMA)
G. J. Nageotte
A. J. Ortego, Jr. (AMA)

K. C. Williamson

Special Activity: The Demand for American Tobacco in Egypt

Contact by correspondence was maintained with the American University at Cairo, Egypt, UAR, with University of Kentucky, with the Foreign Agriculture Service Tobacco Division, and with the Tobacco Trade Cooperator Association with regard to completion of the cigarette consumer preference study contract with the Social Science Research Director of American University. A contractual extension of time was negotiated. The substance of this project was reported in 1962.

D. U. Livermore

Special Activity: Economic Development

Late in 1962 the Halifax Junior Chamber of Commerce asked Extension specialists of the Department of Agricultural Economics and Rural Sociology to assist them in planning a program for community economic development. This specialist met with the group and then, with Dr. Blume, Rural Sociologist, helped them design a community survey.

This survey was conducted and analyzed by Junior Chamber of Commerce members. Two major findings were that people felt they needed another drug store and that a new zoning policy was needed if the community were to progress economically.

As a result of the survey, the bank is expanding its space to permit a drive-in window and some customer parking. A filling station is undergoing a complete remodeling. A regional department store has located in Halifax. Three persons are interested in establishing a drug store in the town.

The Junior Chamber of Commerce is continuing its efforts. It is now, however, putting most of its efforts into one phase of the needs uncovered by the survey. They are working on a proposal for studying the zoning regulations and policies of Halifax with the hope of modernizing and improving them.

Don. L. Long

Miscellaneous Marketing Activities of Members of
Project IV Committee

L. L. Denison

1. Virginia Farm Equipment Convention, Norfolk, Virginia
2. National Institute of Animal Agriculture, Purdue University, Lafayette, Indiana
3. Plant Planning Data Subcommittee of Southern Extension Marketing Committee, N. C. State College, Raleigh, N. C.
4. Oliver Business Management Conference, Charlotte, N. C.
5. Annual Farm Equipment Dealers Conference, V.P.I.
6. American Farm Economic Association Meetings, University of Minnesota, Minneapolis, Minnesota
7. Staff meetings, faculty meetings, and seminars
8. Prepared an annual report and a plan of work
9. Worked on committee to draft a proposal of suggested scholars to invite to V.P.I.
10. Worked on committee to draft a tentative proposal for a Federal contract in the retail farm equipment industry
11. Worked on committee to draft a proposed program for the 1964 American Farm Economic Association meetings.
12. Worked with other staff members to analyze the records of H. Bryant, a feed and fertilizer manufacturer, and suggested ways of improving the firm's efficiency.

Max R. Glass

1. Attended the Extension Marketing Staff meetings to improve and more closely coordinate the overall Extension

Max R. Glass (con't.)

Marketing program.

2. Attended Department staff meetings for the purpose of evaluating the Department's current graduate program and other proposals.
3. Met with the Executive Secretary of the Virginia Farm Equipment Association to discuss and evaluate the Fourth Annual Farm Equipment Dealers Workshop.
4. Visited individual farm equipment dealership to obtain "actual" data for use in topic presented at Fourth Annual Farm Equipment Dealers Workshop.

R. P. Jenkins

1. V.P.I. Role Study
2. Food Distribution Conference
3. Roadside Marketing Conference
4. Apple Processors Workshop
5. Tri-State Packers Meeting
6. Virginia State Horticultural Society
7. Sweet Potato Kick-Off Dinner
8. Virginia Sweet Potato Council Meeting
9. Virginia Bankers Conference

Articles Written as Follows:

1. Apple Processing Research at V.P.I.
2. The PACA
3. An Analysis of the Potential Market for Virginia Strawberries

R. P. Jenkins (Con't.)

4. A New Management Tool for Processors
5. USDA Proposed Change in Canned Tomato Standards
6. Outlook for Vegetables
7. Outlook for Processed Vegetables
8. Outlook for Fruit
9. An Economic Analysis of Establishing a Roadside Market
10. Sweet Potato Handling Circular
11. Various Press Releases, Radio, Tapes, etc.

D. U. Livermore

1. As Chairman of Project IV, the Specialist has served on the Southern Regional Extension Marketing Committee, and the Regional Subcommittee for the proposed 1954 Regional Marketing Conference. The AMA Livestock and Meat Specialist has also served on the subcommittee for feasibility study coordination and publication for the region.
2. A substantial amount of time was devoted to staff administrative, organizational, planning, and coordination responsibilities with respect to Projects III, IV, and VII in the capacity of Extension Economics Project Leader.
3. Assistance was given to personnel of Georgia Extension Service with respect to AMA program content.
4. Attention was given to the content of a proposal for an FES Management Contract on farm equipment dealer Extension work. Proposal was reviewed with state and FES personnel.

D. U. Livermore (Con't.)

5. Served as chairman of committee on arrangements for the Departmental Visiting Scholar Program.
6. Attended the National Outlook Conference
6. Based on research done in previous years, with the aid of a graduate research assistant, a bulletin entitled "The World Cashew Industry and U. S. Peanut-Cashew Demand Relationships" was published.
7. Assisted D. D. Badger with review and criticism of his Doctoral thesis entitled, "Impacts of Asset Fixity on Aggregate Peanut Supply Response." About 50 copies were subsequently mailed to a selected list of peanut industry personnel and libraries in all major peanut producing states.
8. Liaison was maintained with the State Department of Agriculture, Division of Markets personnel.

H. M. Love

1. Two months reviewing area summaries of V.P.I. Role Study, correcting statistical inconsistencies, and preparing an economic interpretation of trends.
2. Assisted with preliminary arrangements for developing a Farm Management Institute.
3. Participated in annual review of farm operations by the Virginia Department of Corrections and Welfare.
4. Carried primary responsibility in arranging schedule for Fourth Annual Conference of Retail Farm Equipment Dealers,

H. M. Love (Con't.)

- providing physical facilities and host to group.
5. Participated in Farm Policy Forum session at North Carolina State of the University of North Carolina at Raleigh and assisted with half day session.
6. Participated in Regional Milk Policy Conference at Asheville, N.C.
7. Served as consultant to the Virginia Bankers' Association Committee on Agriculture and participated in the Annual Farm Credit Conference.
8. Conducted forum discussion of farm policy matters at the Leadership Training School of the Virginia Farm Bureau Association.
9. Presented discussion of farm business records and their use to Vegetable Growers at Atlantic City, New Jersey, on invitation from Agricultural Extension Service of Rutgers University.
10. Counseled Rockingham National Bank in the establishment of an Agricultural Service Department.
11. Served as member of the Programs Committee for the Virginia World Trade Conference.
12. Addressed various state and local groups on timely topics.
13. Assisted with the Annual Income Tax Conferences in Roanoke and Richmond.
14. Consulted with various industry and commodity groups upon ways to increase effectiveness of the Extension program of education in Agricultural Economics.
15. Projected plans for testing out new approaches by lenders to the job of providing adequate credit for the operation of a farm business.

W. R. Luckham

1. Work on the V.P.I. Role Committee in providing state and area figures, projection and interpretation, and serving on a specific area committee.
2. Participating in "Conference on Cooperatives and the Future."
3. Assisted committee on proposal for AFEA meetings.
4. Birmingham Workshop "The Role of Boards of Directors in Business Management."
5. Poultry Servicemen's Schools (2)
6. Virginia State Poultry Federation Convention
7. National Outlook Conference
8. Assisted with marketing research and Extension program planning.
9. Extension Staff Outlook Conference
10. Staff meetings, seminars, and Farm Credit Conference.
11. Farm Equipment Dealers Conference.
12. The AMA Specialist has cooperated with the poultry and other specialists in providing economic analyses in various areas of production and farm marketing.
13. A fact sheet based on coefficients reasonable and obtainable in this state, and indicating expected costs and returns from various types of layer enterprises has been published as a handout for use by other departments and included in an article in Virginia Poultryman.
14. The AMA Specialist, in cooperation with other departments, also participated in several poultry meetings, and talked about the

W. R. Luckham (Con't.)

factors affecting the economics of production; marketing eggs; money management, financing the poultry operation and other similar topics.

G. J. Nageotte

1. Annual meeting of the Virginia Dairy Foundation
2. V.P.I. Role Study
3. Attended annual meetings of the Roanoke Dairy Council and Tri-State Milk Producers Association.
4. Attended annual meeting of the American Dairy Science Association, Purdue University.
5. Participated in annual conference and district conferences of DHIA Supervisors.
6. Conducted training of State FFA Dairy team in methods of judging milk and milk products.
7. Assisted in conducting Junior Dairy Show and Regional 4-H and FFA Dairy Judging Contest at the Atlantic Rural Exposition.
8. Attended Southern Regional Dairy Extension Specialists Workshop, New Orleans, Louisiana. Presided over two half-day sessions. Presented paper on "Extension Activities to Promote the Production of High Quality Milk."

A. J. Ortega, Jr.

1. Virginia Dairy Products Association Annual Convention, Richmond.
2. Association of Southern Agricultural Workers Meeting, Memphis.
3. Southeastern Dairy Marketing Clinic, New Orleans.

A. J. Ortego, Jr. (Con't.)

4. Norfolk Cooperative Milk Producers Annual Meeting, Blackstone.
5. Southside Cooperative Milk Producers Annual Meeting, Blackstone.
6. Program Planning in Marketing Research and Extension. Considerable time was spent in an attempt to improve the marketing programs in both research and extension and to better coordinate the two. I hope something was accomplished.
7. Work with the manager of a feed mill was the time spent working with John Hill with the rest of the marketing staff.

K. C. Williamson

1. Participated in Extension Training Conference on the Role of the Board of Directors in Business Management held at Birmingham, Alabama.
2. Assisted with tour of Virginia cattlemen to feedlots in N. C.
3. Attended the Eastern National Livestock Show held at Timonium, Maryland.
4. Served on National Extension Marketing Committee.
5. Made talk on "Responsibilities of a Livestock Auctioneer" at annual meeting of Virginia Association of Auctioneers.