

**INTERIM REPORT OF THE VIRGINIA  
AGRICULTURAL OPPORTUNITIES COMMISSION  
TO  
THE GOVERNOR  
AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



**SENATE DOCUMENT NO. 7**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF PURCHASES AND SUPPLY  
RICHMOND  
1979**

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E. A. BORCHERS, Director of Virginia Truck and Ornamental Research Station  
M. A. FIELDS, Chairman, Department of Agriculture, Virginia State College

**Interim Report of the Virginia**

**Agricultural Opportunities Commission**

**To**

**The Governor and the General Assembly of Virginia**

**Richmond, Virginia**

**December, 1978**

To: Honorable John N. Dalton, Governor of Virginia

and

The General Assembly of Virginia

**I. INTRODUCTION**

The Virginia Agricultural Opportunities Commission was established pursuant to to Senate Joint Resolution No. 9 by the 1978 Session of the Virginia General Assembly.

**SENATE JOINT RESOLUTION NO. 9**

Establishing the Virginia Agricultural Opportunities Commission; allocation of funds.

WHEREAS, because Virginia agriculture, including forestry, is the largest industry in the Commonwealth and the mainstay of our economy, it is imperative for this industry to continue strong and viable; and

WHEREAS, agriculture is faced with many economic and social changes which cause many farmers to consider not remaining in farming; and

WHEREAS, the future of agriculture continues to depend upon the profitability of farming, which has steadily declined in recent years because of increased production costs, taxes and land prices, environmental constraints and depressed farm commodity prices; and

WHEREAS, Virginia farmers must consider new production and marketing opportunities as consumer demand for food and fiber products continues to increase; and

WHEREAS, the wise use of land resources is vital to a strong and healthy agriculture; and

WHEREAS, productive agricultural land is being lost to development pressures; and

WHEREAS, since the preservation of the agriculture industry is essential for the welfare of all Virginia citizens, State government should assume a primary role in identifying potential opportunities for Virginia farmers and redefine the State's role in developing and enhancing Virginia's agriculture industry; now, therefore, be it

RESOLVED by the Senate of Virginia, the House of Delegates concurring, That the Virginia Agricultural Opportunities Commission is hereby established.

The duties of the Commission shall include advising the Governor and the General Assembly on the state of the industry of agriculture; identifying new and expanded production and marketing opportunities for Virginia farm products; and recommending a course of action that will promote the development of the opportunities identified.

The Commission shall consist of sixteen members, four of whom shall be members of the Senate and shall be appointed by the Committee on Privileges and Elections of the the Senate, and six of whom shall be members of the House of Delegates and appointed by the Speaker of the House of Delegates. In addition to the legislative members, four citizens of Virginia representing major segments of the agriculture industry shall be appointed by the Governor. The Commission shall also include the Commissioner of the Virginia Department of Agriculture and Commerce and the Dean of the College of Agriculture and Life Sciences of the Virginia Polytechnic Institute and State University.

The legislative members of the Commission shall receive such compensation as is set forth in § 14.1-18 of the Code of Virginia and all members shall be reimbursed for necessary reasonable expenses incurred in the performance of their duties in the work of the Commission, for which there is heregy allocated from the general appropriations to the General Assembly the sume of five thousand dollars.

All agencies of the Commonwealth are requested to assist the Commission in its work.

The Commission shall make an interim report to the Governor and General Assembly no later than November one, nineteen hundred seventy-eight and a final report no later than December one, nineteen hundred seventy-nine, whereupon the Commission's existence shall terminate.

Howard P. Anderson of Halifax, patron of Senate Joint Resolution No. 9 and Chairman of the Agriculture, Conservation and Natural Resources Committee of the Senate of Virginia, was elected Chairman of the Commission. Ford C. Quillen of Gate City, Chairman of the House Agriculture Committee, was elected as Vice Chairman.

In addition to the Chairman and Vice Chairman, Elmon T. Gray of Waverly, Frank W. Nolen of New Hope and Coleman B. Yeatts of Chatham were appointed by the Senate Committee on Privileges and Elections from the membership of the Senate of Virginia. Also appointed by the Speaker of the House of Delegates were L. Ray Ashworth of Wakefield, J. Paul Councill of Franklin, Joseph P. Crouch of Lynchburg, Calvin G. Sanford of Hague and William T. Wilson of Covington.

The following citizens were appointed to serve on the Commission: S. Mason Carbaugh of Richmond, Commissioner of the Department of Agriculture and Consumer Services; James R. Nichols of Blacksburg, Dean of the College of Agriculture and Life Sciences of Virginia Polytechnic Institute and State University (hereafter referred to as VPI and SU); Robert B. Delano of Richmond; J. Edwin Givens of Richmond; Harvey G. Pope of Courtland; and Fred W. Scott, Jr. of North Garden.

## **II. WORK OF THE COMMISSION**

The Commission held its first meeting on June 19, 1978. Major accomplishments included the following:

1. S. Mason Carbaugh, Commissioner of the Virginia Department of Agriculture and Consumer Services, reviewed the work of the 1969 Commission of Virginia's Industry of Agriculture and the 1970 Rural Affairs Study Commission.

2. Election of Commission Officers. Senator Howard P. Anderson was elected Chairman; Delegate Ford C. Quillen was elected Vice Chairman; and Mr. Bragdon R. Bowling, Jr., Division of Legislative Services was appointed Secretary.

3. Senator Anderson reviewed the purpose of the Commission. Each Commission member discussed areas of special concern affecting agriculture and forestry which he felt merited Commission attention.

4. Senator Anderson appointed a Task Force headed by Commissioner Carbaugh to: identify possible areas to be studied; discuss the process of the Commission's work; and identify staff resources from each agency on the Task Force that can be used to assist the Commission in its work process.

The Commission held its second meeting on September 7, 1978. Major accomplishments included:

1. Discussion of Commissioner Carbaugh's Task Force report.
2. Appointment of subcommittees recommended in the Task Force Report:

*Regulations:* Delegate Ford C. Quillen, Chairman

*Finance and Profitability:* Senator Frank W. Nolen, Chairman

*Markets and Marketing:* Senator Elmon T. Gray, Chairman

*Special Issues:* Delegate L. Ray Ashworth, Chairman

Each subcommittee was directed to meet at least one time between the September 7 meeting and the October 19 meeting of the Commission. It was decided that each subcommittee would decide what areas it would study and the procedures to be used in studying specific areas of responsibility.

The Commission held its third meeting on October 19, 1978. Major accomplishments included:

1. Reports from each subcommittee. Each report is included in this interim progress report.
2. Reports from Dr. Joe Coffey, Professor and Chairman of the Department of Agricultural Economics, VPI and SU, on "Situation, Trends, and Projections for Virginia Agriculture," and from Mr. W. C. Stanley, Forest Resource Coordinator, Division of Forestry, on "Forestry Developments." This information is also included in this interim progress report.
3. The Virginia Department of Agriculture and Consumer Services with assistance from the Federal Crop Reporting Service, Virginia Division of Forestry and VPI and SU, will prepare a booklet of charts containing changes in major Virginia agricultural and forestry indicators over the past ten to twelve years. This booklet will be included as a part of the Commission's work and will be distributed to interested persons in Virginia. This booklet is scheduled to be completed by August, 1979.
4. A full Commission meeting was planned for December 13, 1978.

### **III. SUBCOMMITTEE REPORTS**

#### **Subcommittee on Markets and Marketing**

An essential part of the profitability of Virginia's industry of agriculture, including forestry, is the existence of adequate markets. Both domestic and foreign markets are essential to the continuing development of our industry. However, the subcommittee has decided to deal primarily with agriculture and forestry exports. Specifically, the subcommittee has agreed to (1) identify problems associated with exporting major agricultural commodities from Virginia ports; and (2) determine and evaluate feasible courses of action necessary to increase the exportation of Virginia agricultural forestry products.

A letter containing seven questions was mailed on September 29, 1978, to 48 individuals who, either indirectly or directly, are involved with exports in Virginia. The purpose of this letter was to obtain information on problem areas. Also, many key persons were invited to meet with the subcommittee on October 19, 1978 and discuss some of the problem areas in greater detail.

The subcommittee will also address possible marketing opportunities for small farmers in Virginia and improved technical services by the State to promote efficient and effective marketing of agricultural products.

Subcommittee on Local, State and Federal Laws and Regulations and Voluntary Programs Related to Agriculture and Forestry.

The increasing number, complexity and duplication of existing and emerging laws and regulations are taking a toll on the industry of agriculture and forestry. We believe these laws and regulations increase the costs of producing food and fiber and contribute negatively to productivity.

The subcommittee has decided to investigate the total effects of these laws, regulations and programs on agriculture and forestry and evaluate ways to monitor and influence existing and future laws, regulations and programs.

The subcommittee will identify those persons and agencies best equipped to provide the subcommittee with information regarding specific laws and regulations. These persons will be invited to attend a meeting with members of the subcommittee in December 1978. Further, these persons will be asked to provide the subcommittee with an analysis and assessment of their respective programs on agriculture and forestry. This information gathering process will be the initial step in determining the "what" and "how". Additional evaluative and study efforts of the subcommittee will be determined after this initial step is completed.

Specific laws, regulations and programs to be studied include:

1. Coastal Zone Management and Best Management Practices.
2. Land application of sludge and other wastes.
3. Clean Air Act and Clean Water Act.
4. Total labor needs of agriculture and forestry.
5. EPA controls and restrictions on chemicals.
6. FDA regulations.
7. Resource Conservation Act.
8. Areas specific to forestry: Resource Planning Act; Wilderness Area Act; and Forestry Incentive Programs.
9. Producer Bargaining.
10. Shifting of productive agricultural and forestal land to other uses.
11. Foreign ownership of agricultural and forestal land in Virginia.

Subcommittee on Special Issues

The following areas will be studied:

1. **Technology.** The subcommittee plans to assess the current state of agricultural and forestry technology and to identify major gaps. Specifically, each major commodity in Virginia will be studied in light of its technology needs. Also, the subcommittee will evaluate existing delivery systems for getting technological information to users.

Additional areas to be studied in this technology section include:

- a. the economic feasibility of grape and wine production;
- b. possibility of new cultural practices, fertilization rates, and pest and weed control;

c. new potentials and technology for on-farm storage of grain;

d. alternative energy supplies for agriculture to include on-farm production of energy; use of wood chips in composting sludge; and the use of hardwood chips, peanut hulls, and sawmill residues as possible alternative sources of energy;

e. water requirements for agriculture to include economics of farm irrigation.

2. Small and part-time farmers. A major objective is to keep farmers in agriculture. There is a need for many farmers to supplement their farm incomes with income from non-farm employment. The subcommittee will assess the situation of small and part-time farmers and recommend opportunities, both farm and non-farm. Direct marketing will be studied.

3. Special commodity areas. The importance and future of tobacco in Virginia will be thoroughly analyzed. Tobacco was selected due to its economic importance to many individual farmers in Virginia and its general economic contributions to the Commonwealth.

4. Commodity promotion and information programs. Additional commodity programs at the state level may be needed to close the information gap between producers and consumers. The effectiveness of self-help programs, to include the Virginia Agricultural Foundation, will be evaluated. Also, major emphasis will be placed on developing consumer education programs explaining that increases in farm commodity prices are not the primary cause of increases in the retail price of food.

5. Transportation needs of agriculture.

6. Information on the general purpose and nature of our land grant university and other major institutions that impact on the industry of agriculture.

Procedures and methods necessary to undertake the work of this subcommittee will be developed at the next subcommittee meeting on December 12, 1978.

#### Subcommittee on Finance and Profitability

In order for individuals to continue their agricultural and forestry operations, they must receive a reasonable financial return to their factors of production (inputs): land, labor, capital and management.

The purpose of this subcommittee is to investigate factors affecting the profitability of different types of farming and forestry operations in Virginia. A mail survey of farmers will be conducted during the middle of November, 1978 in order to obtain the farmer's perspective of strengths and weaknesses associated with the profitability of farming.

Proper analysis of this information will identify present weaknesses and strengths and give us information on possible future changes and opportunities for Virginia agriculture and forestry. The Planning and Development staff of the Virginia Department of Agriculture and Consumer Services, and personnel of the Federal-State Crop Reporting Services, will conduct this survey and analyze the data.

The results of this study will be divided into those areas where positive contributions can be made by (1) state agencies, institutions and private and public organizations in Virginia; (2) the Virginia General Assembly; (3) the federal government; and (4) the free market economy that relates to agriculture and forestry.

In addition to this study, VPI and SU will be asked to develop some model or typical farm enterprise budgets for key agricultural situations in Virginia. This would serve as an informational piece to those persons in agriculture or those interested in entering agriculture. Such areas as rate of return; size of farming operations and capital requirements would be explained.

#### **IV. SITUATION, TRENDS, AND PROJECTIONS FOR VIRGINIA AGRICULTURE**

The agricultural sector is one of the leading sectors of the Virginia economy. About 80,000 family and hired workers are employed on Virginia's 61,000 farms. Farm assets in Virginia exceed \$9 billion. Total gross farm income is \$1.2 billion. The farming sector is closely related to the rest of Virginia's economy. The \$1 billion of farms marketings generates an estimated 47,000 jobs, \$1.7 billion of sales, and some \$400 million of personal income in the non-farm sector of Virginia. The non-farm sector is also important to the farm sector. The farm family in Virginia receives more of its net income from off-farm sources than it does from farming.

##### **Profitability**

Due to its importance, the profitability of farming which is essential to farmings viability is of concern to all Virginians. Virginia farmers are continually making adjustments in their operations in order to cope with the cost/price squeeze. This has led to a reduction in farm numbers and an increase in farm sizes in order to spread costs over a larger unit. Two problems which have been severely felt by farmers in recent years has been inflation and price gyrations. Taking into account inflation, net income both in total and per farm in Virginia currently is the lowest it has been in more than a decade (Charts 1 & 2). Price gyrations triggered by highly volatile exports, especially to the Soviet Union, and yield fluctuations caused by weather have been especially severe during the 1970's.

The value of assets in Virginia agriculture has doubled since 1970 reaching a value of \$9.2 billion in 1977. However, 80 percent of this increase has been due to inflation and only 20 percent has been due to an increase in actual physical assets. The debts owed by Virginia farmers have almost doubled during the 1970's as well, increasing from \$0.6 to \$1.1 billion. However, Virginia farmers compared to farmers in the rest of the nation appear to be on a firmer financial base. Virginia farmers have only \$12.20 of debts per each \$100 of assets they own, whereas U.S. farmers have \$15.20 of debts per \$100 assets.

Returns to farmer investments in agriculture measured in terms of the ratio of earnings to equity have been extremely low (Chart 3). Generally, earnings on equity in farming has been below one percent. This is not only substantially below earnings in other sectors but is below earnings for the U.S. as a whole.

##### **Productivity**

Productivity growth in agriculture has been much greater than that in the non-agricultural sector. In fact, increases in productivity rather than increases in resources used in agriculture has been responsible for most of the production expansion in U.S. agriculture. In Virginia, for example, cash grain production during the previous decade increased 60 percent. However, only one-fifth of this increase in production was attributable to the use of more land, labor, and capital. The other four-fifths were due to yield increases brought about by modern scientific-based technology. Similarly, dairy and poultry production expansion has been largely attributable to productivity increases. However, there is a need for concern because yields of Virginia's major crops are not keeping pace with U.S. yields (Chart 4). Virginia yields of hay, soybeans, tobacco, wheat, corn silage, barley, and peanuts have not increased as fast as U. S. yields. Of these major crops only peanuts, barley, corn silage and wheat currently exceed the U.S. average yields. Productivity in poultry and dairy in Virginia are gaining and are near the national averages.

Since yield and productivity increases in agriculture largely stem from improvements brought about by agricultural research, research funding is of particular significance to maintain a viable industry of agriculture. During the past decade, agricultural research expenditures at VPI & SU have increased only slightly when inflation is taken into account (Chart 5). Federal funding has actually declined and state funding has increased by only 10 percent.

##### **Projections**

Commodity projections by the U.S. Department of Agriculture suggest that soybeans, corn, and barley will be the most rapidly increasing crops in Virginia during the next decade (Chart 6). However, with the exception of soybeans and barley, production in Virginia is not expected to



increase as rapidly as in the country as a whole and therefore the Virginia share is expected to decline.

By 1985 the number of farms in Virginia is likely to drop by 10,000 and one million acres of land is expected to be shifted out of farm production. Gross farm income will increase to \$1.7 billion and the value of the real estate per farm will increase to \$190,000.

The number of farms in Virginia has been declining and the average size of a farm is increasing. However, this overall trend results from two divergent trends. The number of small farms is declining rapidly while the number of large farms is increasing (Chart 7). The divergent trends and resource situation on small versus larger farms point out the need for close examination and careful diagnosis before conclusions are reached or recommendations offered.

### Rural Population Reversal

Beginning with the 1970's there has been an unprecedented reversal in population growth in metropolitan and rural counties in Virginia (Chart 8). In the 1960's population in metropolitan counties grew rapidly while population in rural counties grew slowly. During the 1970's rural county population growth has been faster than metropolitan growth. The reasons and consequences of the population reversal are not fully understood. Access to the interstate highway system has been a key factor to the growth of many rural counties. Industry has tended to locate its new plants in rural areas. Also, there appears to have been a shift in residential location preferences to rural areas. This change in population distribution does raise challenging questions about the implications for the agricultural sector. Will this added rural growth drive up farm land prices higher? Will it provide improved part-time jobs for farmers? Will it improve public services in rural areas? These and other questions merit exploration.

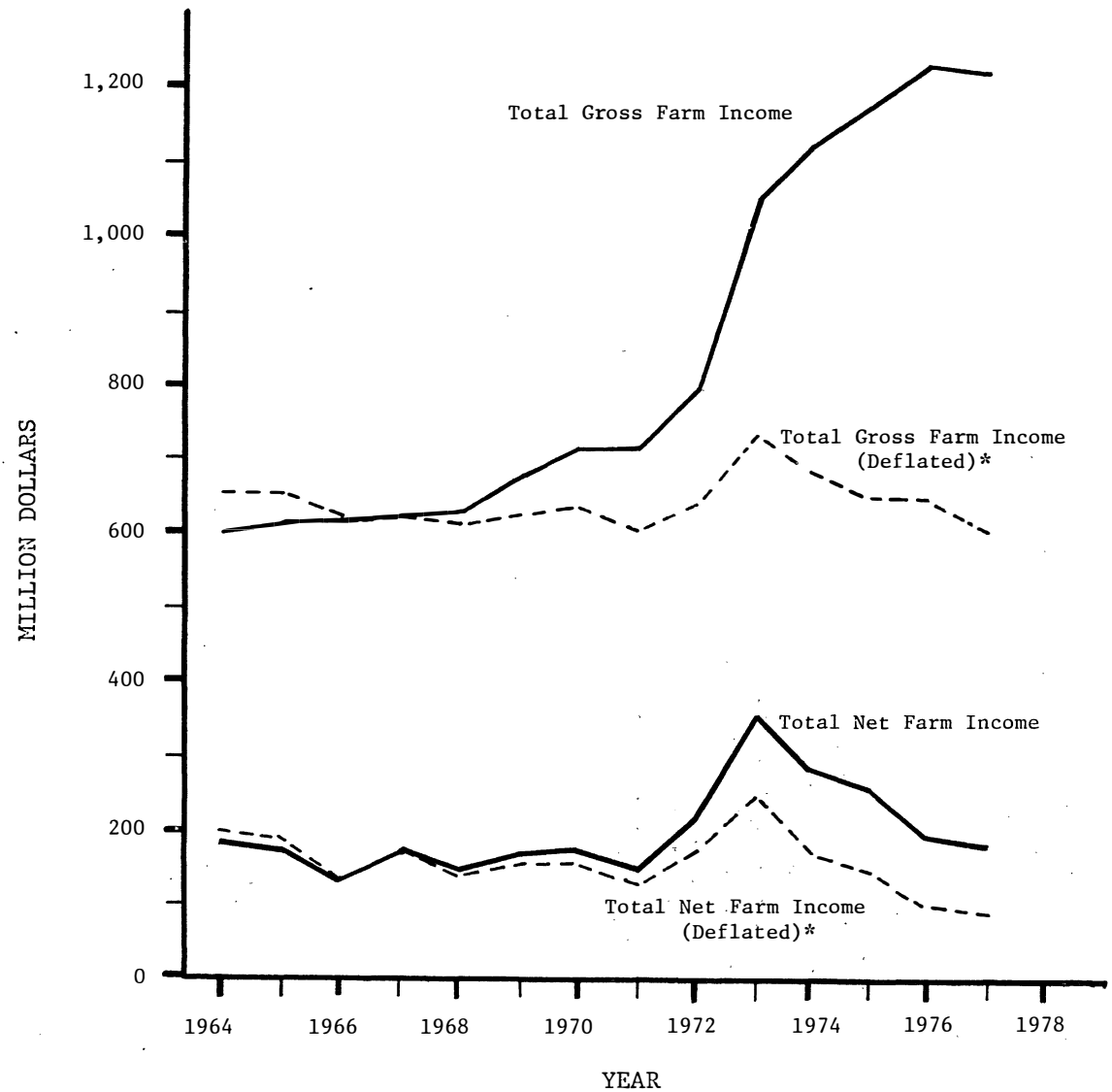


Chart 1. Virginia Total Gross Farm Income and Net Income From Farming, 1964-77.

\*Deflated by Index of Prices Paid by Farmers, 1967 = 100

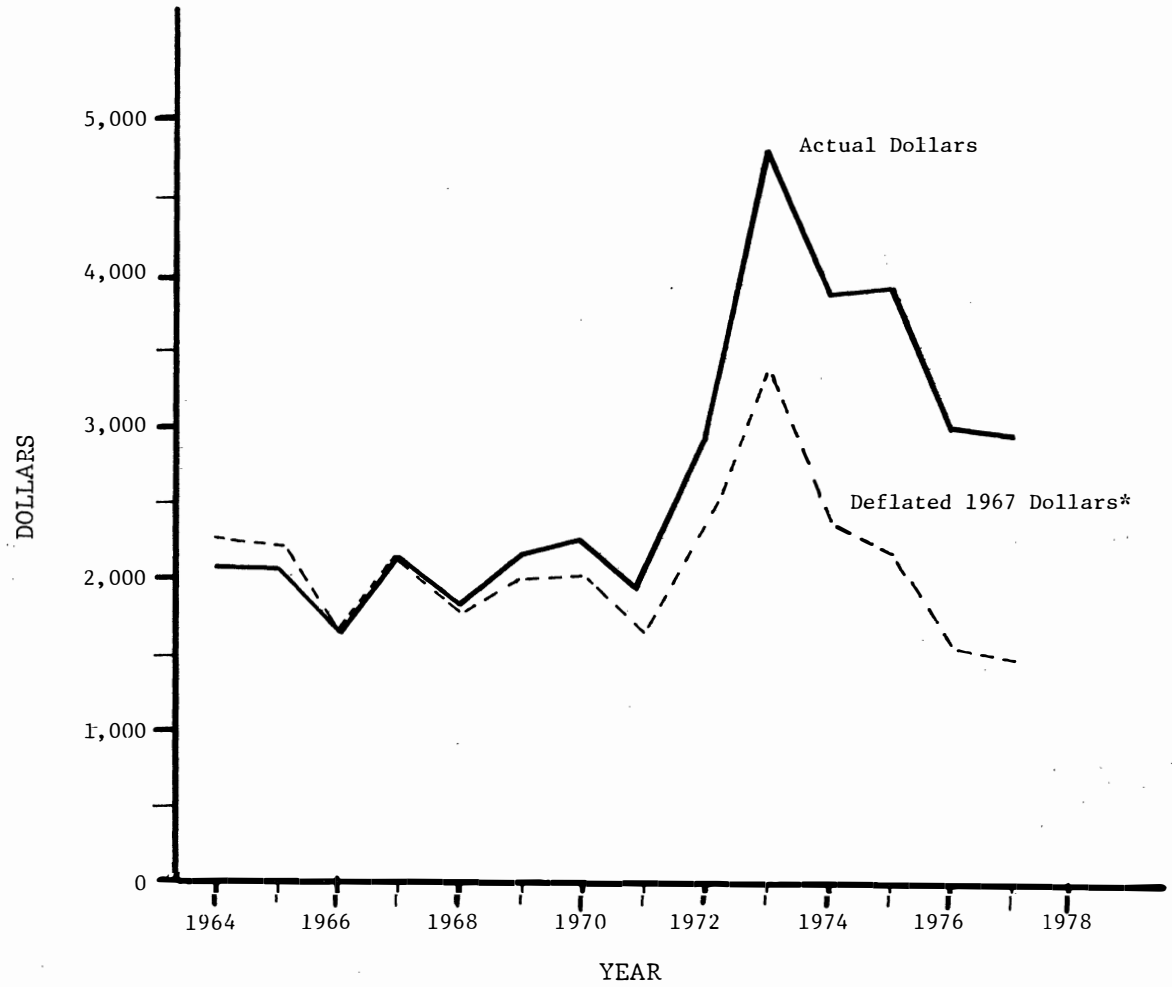


Chart 2. Average Total Net Income Per Farm, Virginia, 1964-77.

\*Deflated by Index of Prices Paid by Farmers, 1967 = 100

### CHART 3.

#### Return to Equity from Farm Production Income in Virginia, 1970-76

Year	Earnings to Equity	Equity	Ratio of Earnings to Equity
	(Mil.Dol.)	(Mil.Dol.)	(Percent)
1970	22.0	4,037	0.5
1971	3.2	4,308	0.1
1972	54.5	4,681	1.2
1973	76.4	5,263	1.5
1974	53.2	6,522	0.8
1975	16.7	6,970	0.2
1976	16.0	7,621	0.2

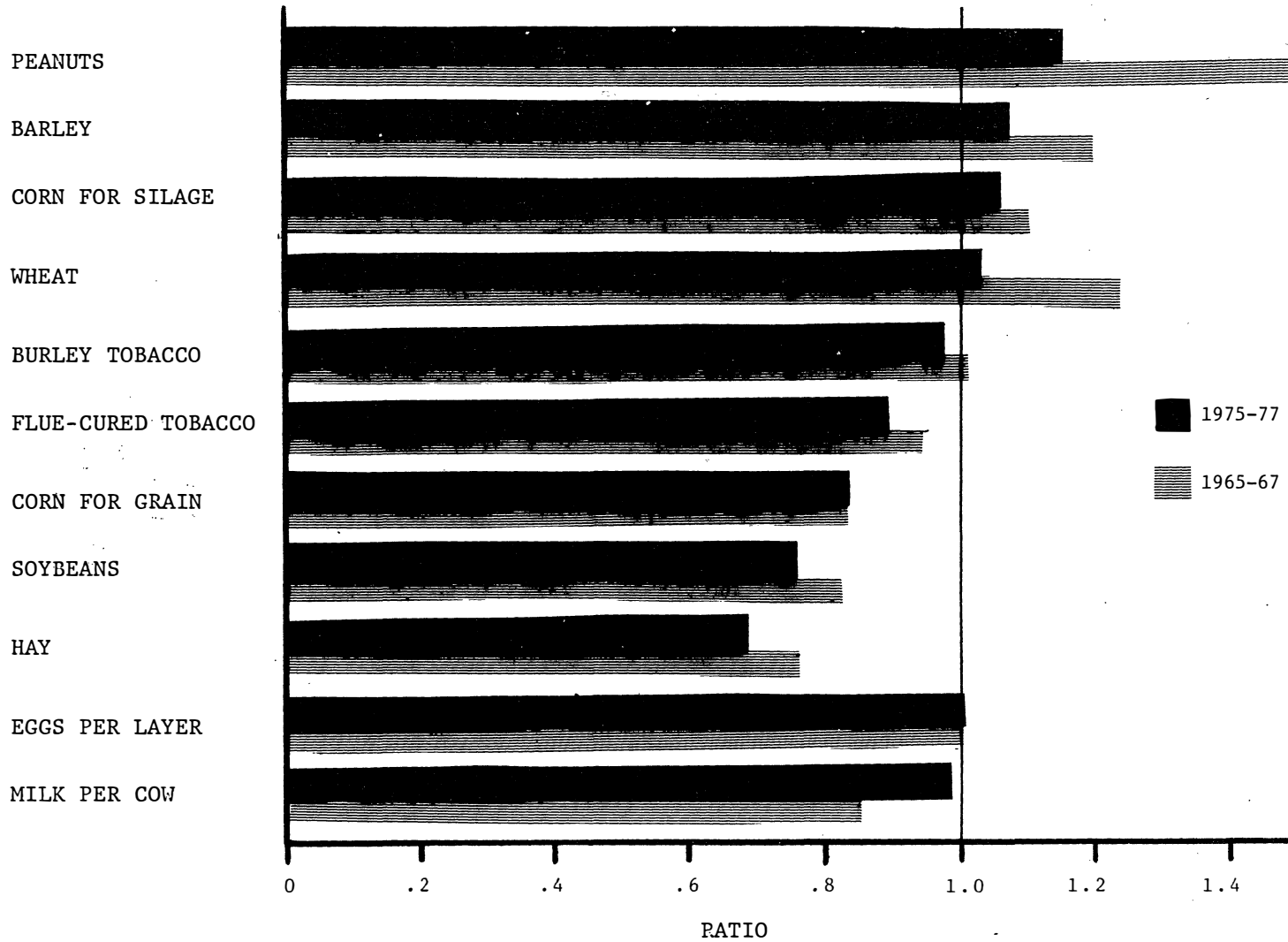


Chart 4. Ratio of Virginia to U. S. Yields of Major Crops and Productivity of Dairy and Poultry, 1975-77 and 1965-67

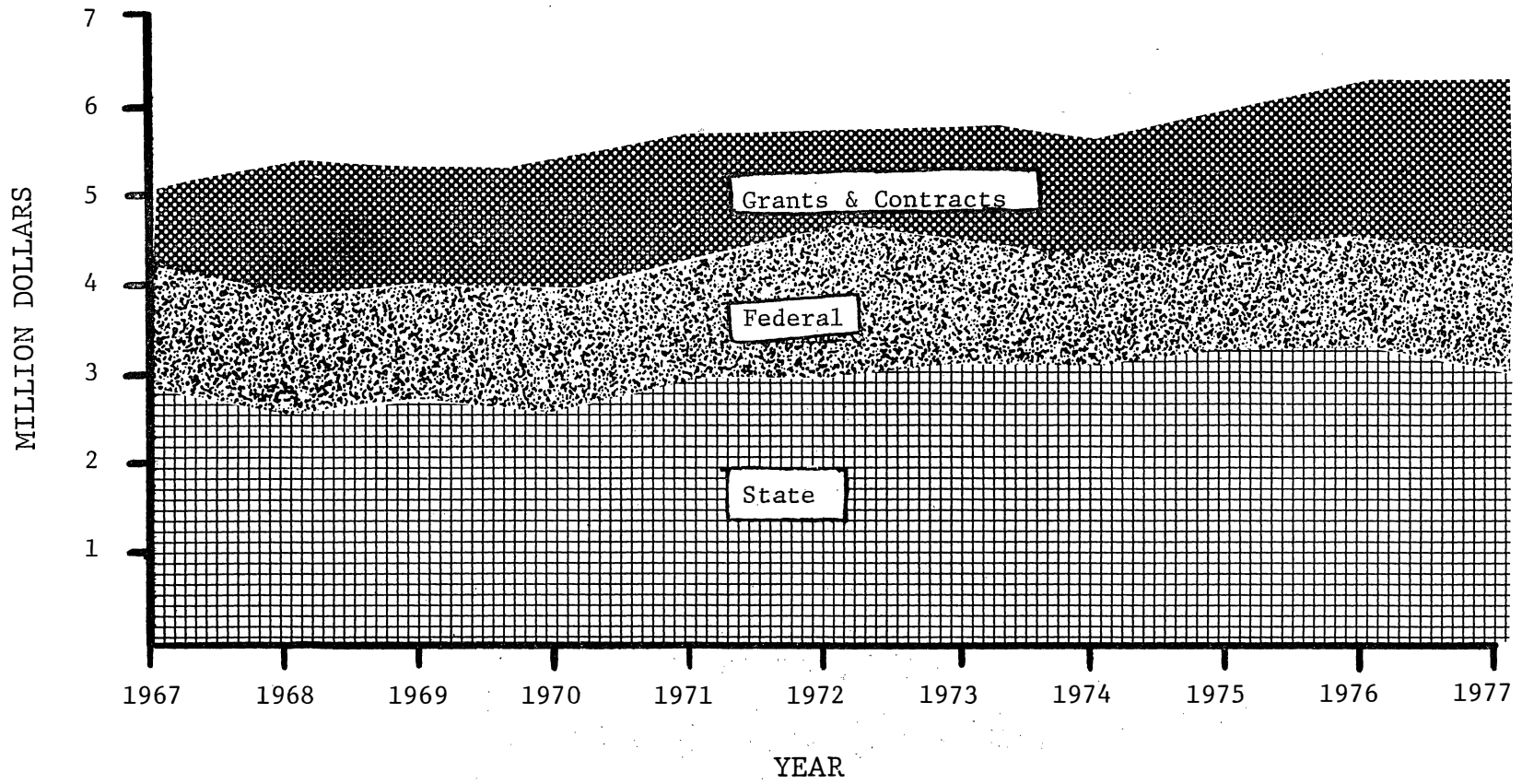


Chart 5. Agricultural Research Expenditures, VPI & SU (1967 dollars)

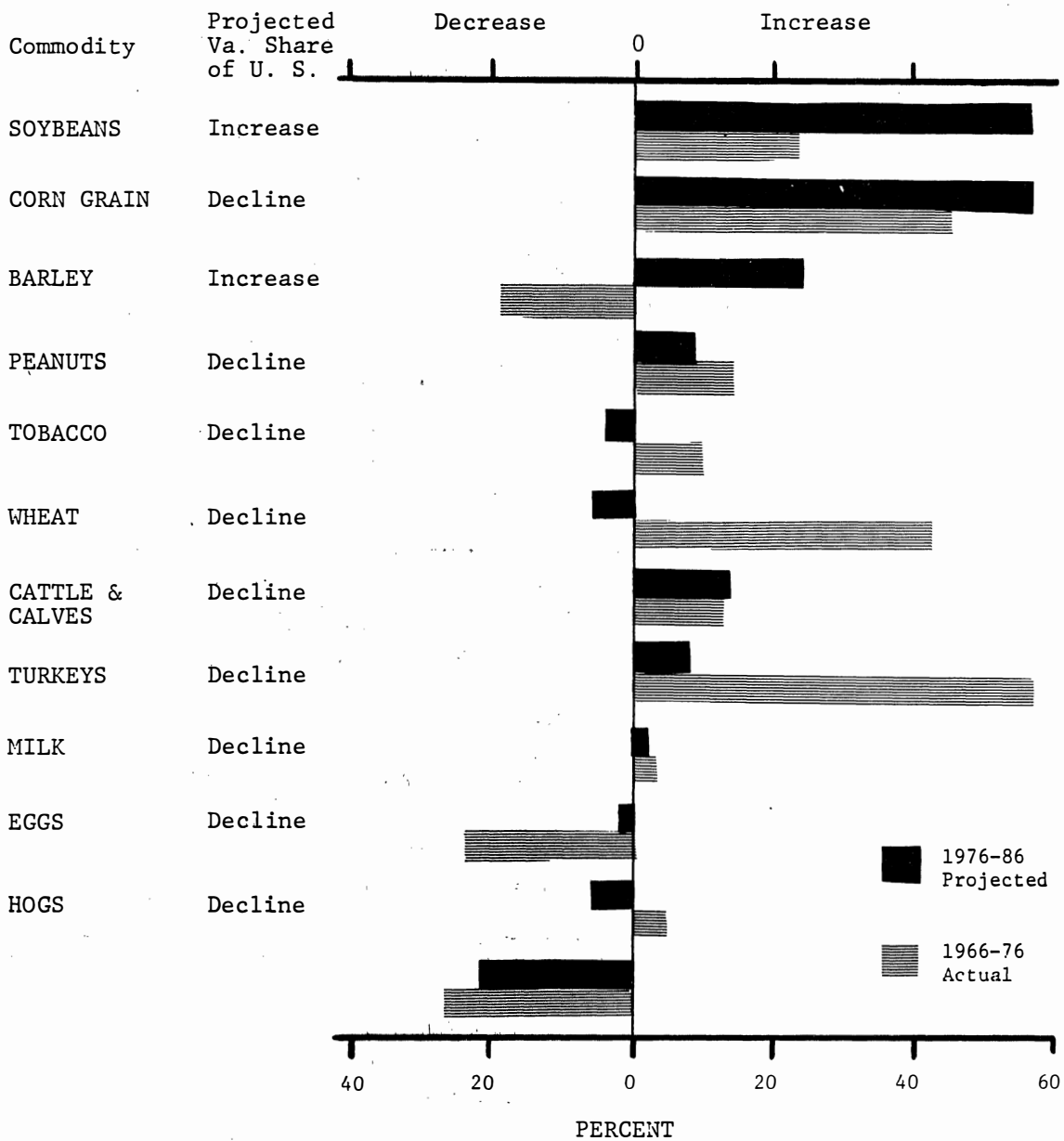


Chart 6. Trends and USDA Baseline Projections for Virginia Agricultural Production

Chart 7. Estimates of Number of Small, Medium, and Large Farms in Virginia

Harvested Acres	1969	1974	1985
	Number Farms		
Small 99 or less	72,100	61,600	44,700
Medium 100-499	5,500	5,800	6,300
Large 500 or more	<u>400</u>	<u>600</u>	<u>1,000</u>
TOTAL	78,000	68,000	52,000

Value of Sales	1969	1974	1985
	Number Farms		
Small \$19,999 or less	65,900	57,100	42,000
Medium \$20,000 to \$99,999	11,000	8,300	4,000
Large \$100,000 or more	<u>1,100</u>	<u>2,600</u>	<u>6,000</u>
TOTAL	78,000	68,000	52,000

Chart 8. Metro vs. Rural Population Growth in Virginia

Counties	Percent Growth/Year	
	1960-70	1970-74
Metro	2.7	1.3
Adjacent to Metro	0.1	1.5
Rural	0.7	1.8



## **V. FORESTRY DEVELOPMENTS**

Virginia's forest resource represents a vital social and economic valve to the state. The forest products industry employs nearly 20% of all wage earners, pays 14% of wages and salaries, and adds 16% product value to the total of manufacturing in Virginia. Recreational pursuits, hunting, fishing and tourism create additional revenues to the state and untold pleasure to visitors traveling through Virginia's forestlands.

The latest forest survey was completed in 1977 for Virginia giving an update on the status of land and timber resources. A glance at the bottom line shows that the total area of commercial forest has changed little in the last ten years and that total timber volume has increased. For the present and near future, this would indicate Virginia will have an adequate forest resource base to meet current production requirements.

Analysis of the data presents a somewhat different view indicating that certain key areas will impact programs or provide market opportunities in the future.

### **THE 15.9 MILLION ACRES OF COMMERCIAL FORESTLAND IN VIRGINIA IS:**

- declining in the Coastal Plain.
- 77% owned by private non-industrial interests.
- being reduced at the rate of 45,000 acres per year to other uses.
- receiving more intensive use from recreation each year.
- receiving increased attention for its value to water quality, wildlife habitat and other environmental considerations.
- being accepted as a need to be preserved as green belts, shade trees and watershed protection in urban areas.

### **THE 19.6 BILLION CUBIC FEET VOLUME OF GROWING STOCK IN VIRGINIA IS:**

- 75% hardwoods (oak, poplar, gum, hickory, and other deciduous species).
- not presently meeting the softwood demand of the pine industry as Virginia was a net importer of pine in recent years.
- under utilized in the small hardwood category because of poor or undeveloped market potential.
- An important resource for the increased use of wood to supply energy needs.

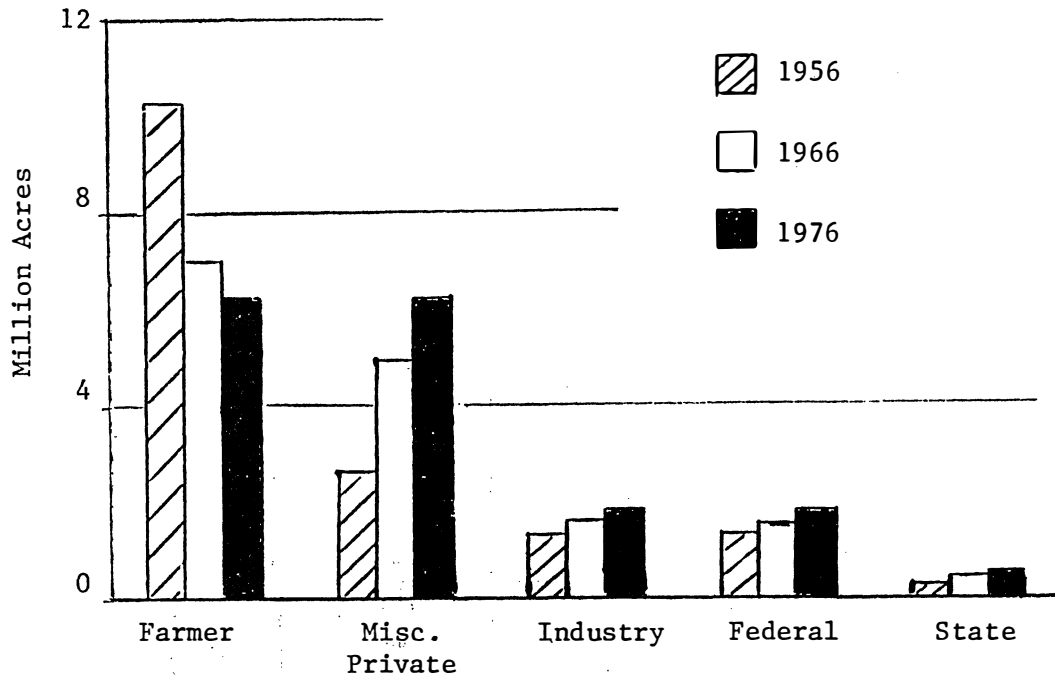
### **THE NON-INDUSTRIAL PRIVATE LANDOWNER WHO CONTROLS 77% OF VIRGINIA'S WOODLAND IS:**

- the key to Virginia's future timber production.
- expected to enjoy as well as provide other amenities to citizens of the Commonwealth who use his woodland.
- dependent upon incentives to make long-term forest investments and develop productive forest enterprises.
- buying or holding land for recreation, future home sites, development, speculative investment, hunting, tax considerations and other uses which may or may not include fiber production as a viable alternative.
- dependent on the state and localities to provide protection from wildfire and insects and disease attack, assess equitable taxes and provide required legislative support.

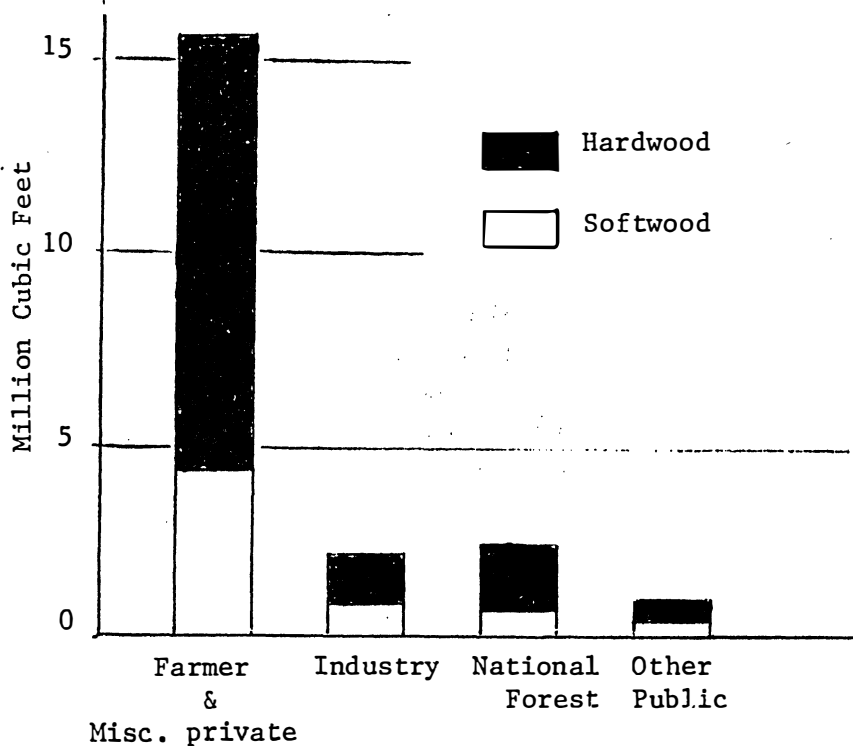
## OPPORTUNITIES

The nation's demand for wood products is projected to continue to increase by more than double by the year 2020. The south's non-industrial private woodlands are now producing 40% of the nation's timber. By the year 2020 this percentage is expected to rise to one-half of all the nation's wood needs being produced in the south's thirteen states. Virginia's geographical position as the entrance to the Eastern megalopolis provides tremendous potential for agricultural and forestal opportunities.

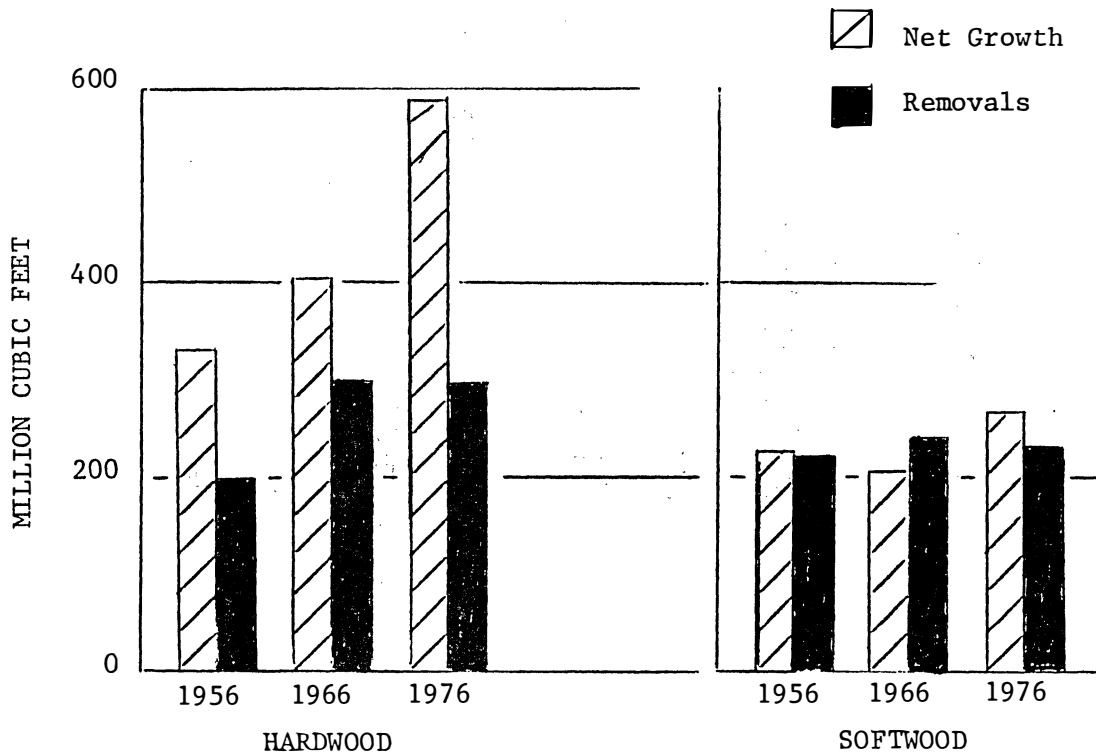
Area of Commercial Forest Land by Ownership Class - 1977



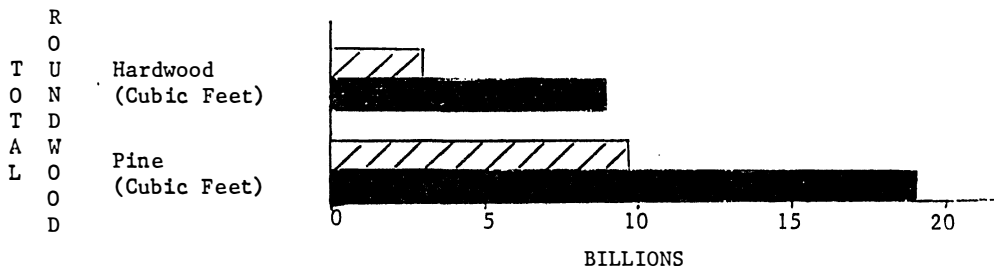
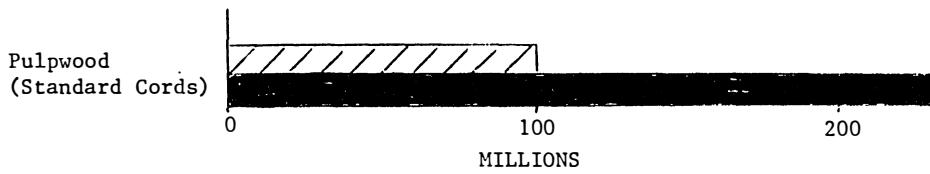
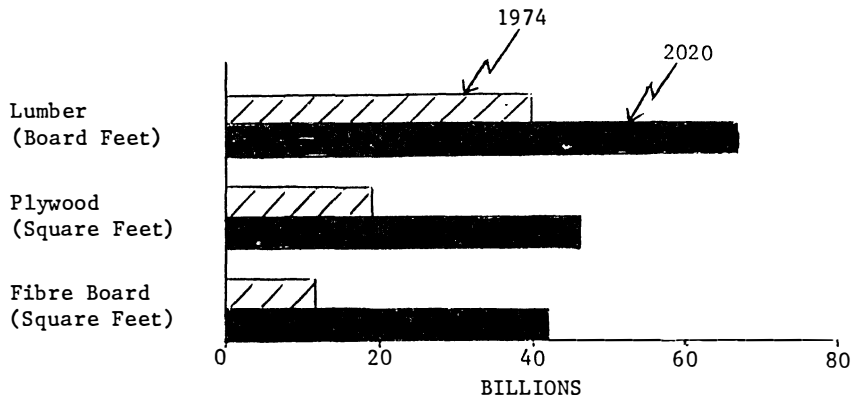
Volume of Growing Stock on Commercial Forest Land by Ownership Class - 1977



TRENDS IN NET GROWTH AND TIMBER REMOVALS  
IN VIRGINIA BY TYPE AND YEAR



PROJECTED DEMAND FOR WOOD  
PRODUCTS BY YEAR 2020



Source: The Nations Renewable Resources-Assessment 1975  
Forest Resource Report No. 21  
USDA - Forest Service

Respectfully submitted,

Howard P. Anderson, Chairman

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