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Briefing Report to the Honorable
Sander M. Levin, House of
Representatives

April 1990

FOREST SERVICE

Timber Harvesting, Planting, Assistance Programs and Tax Provisions





United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-226646

April 13, 1990

The Honorable Sander M. Levin
House of Representatives

Dear Mr. Levin:

This briefing report responds to your October 24, 1989, request for information on timber harvesting and planting, federal timber assistance programs, and federal tax provisions affecting the industry. The answers to the specific questions you raised are summarized below:

Q: How did timber harvesting and planting and seeding levels change from 1986-88?

A: Timber harvesting increased 4 percent from 1986 to 1988, and timber planting and seeding increased 23 percent over this same period. Both of these increases represent a continuation of generally steady upward trends dating back over several decades. (See sec. 2 for further details.)

Q: What were the impacts of federal timber assistance programs, and what were their costs from 1986-88?

A: Most of the increase in timber planting and seeding was comprised of increases under financial assistance programs for small landowners administered by the Department of Agriculture. Annual payments under the programs for planting and seeding grew from \$23.6 million for 1986, to about \$36.9 million for 1988. (See sec. 3 for further details.)

Q: What federal income tax provisions currently apply to the timber industry, and what are their impacts on federal revenues?

A: Various tax code provisions affect the industry's calculation of taxable income. The Joint Committee on taxation recently estimated that two such provisions reduce federal revenues by \$460 million annually. (See sec. 4 for further details.)

B-226646

Major contributors to this briefing report are listed in appendix II.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "John W. Harman".

John W. Harman,
Director, Food and
Agriculture Issues

APPENDIX		<u>Page</u>
I	DEFINITIONS OF REGIONS USED IN THIS REPORT	18
II	MAJOR CONTRIBUTORS TO THIS REPORT	19
FIGURE		
2.1	Volume of National Timber Harvesting, 1986-88	8
2.2	Volume of National Tree Planting and Seeding, 1986-88	9
3.1	Volume of Tree Planting and Seeding Under USDA Assistance Programs, 1986-88	11
5.1	Projected Volume of National Timber Harvesting, 1988-2040	14
5.2	Projected Changes in Regional Timber Harvesting Volumes, 1986-2040	15
6.1	Projected Decreases in National and Regional Timber Industry Employment, 1985-2040	17

ABBREVIATIONS

ACP	Agricultural Conservation Program
ASCS	Agricultural Stabilization and Conservation Service
CRP	Conservation Reserve Program
FIP	Forestry Incentive Program
FmHA	Farmers Home Administration
GAO	General Accounting Office
USDA	U.S. Department of Agriculture

5. What future changes are expected in timber industry employment nationally and by region from 1985-2040?

We obtained data on recent timber harvesting, planting and employment, and projected future harvesting and employment from the Forest Service. We obtained program and cost data on current timber planting and seeding assistance programs from the Agricultural Stabilization and Conservation Service (ASCS) in the Department of Agriculture. Because of the limited time available to conduct our study, we did not independently verify the accuracy of the data provided by the agencies. Also, Forest Service projections of future conditions were based on mathematical models whose reasonableness and accuracy we did not assess. Information on tax provisions was largely extracted from a review of the Internal Revenue Code. We obtained available data on impacts on the federal revenue associated with these provisions from reports published by the Joint Committee on Taxation.

We did not evaluate effects of tax provisions or assistance programs on the timber industry.

In every instance, we attempted to obtain the latest available data. In some instances, the time frames for the data differ because of differences in collection and compilation cycles between the agencies. Also, slight discrepancies may exist between certain harvesting data contained in our report and previously published data because the Forest Service continually reestimates these data on the basis of more current information it receives.

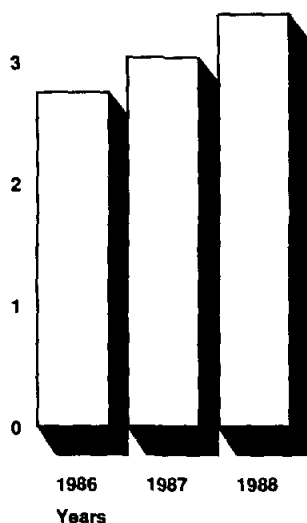
A summary of the information contained in this report was presented in testimony before the House Committee on Ways and Means on March 8, 1990. The Committee requested we provide supplemental information for the hearing record in response to members' questions, which we agreed to do.

NATIONWIDE TREE PLANTING AND SEEDING, 1986-88

As figure 2.2 indicates, the number of acres planted and seeded annually increased 23 percent nationwide from 1986 to 1988 (going from 2.75 million in 1986 to 3.39 million during 1988).

Figure 2.2: Volume of National Tree Planting and Seeding, 1986-88

4 Millions of Acres



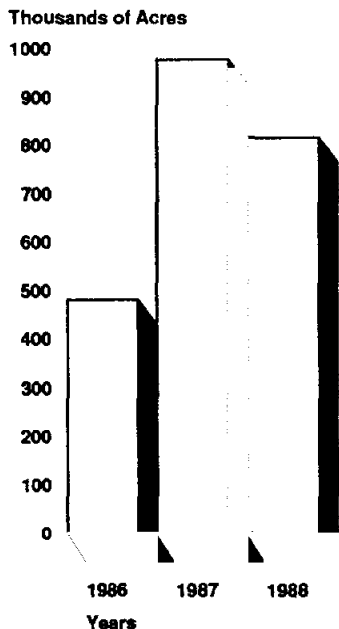
Source: Forest Service.

Planting and seeding nationally in 1987 was 280,000 acres higher than in 1986. In 1988 it was higher than the 1986 level by 641,000 acres. Thus plantings and seedings for both years together exceeded the 1986 level by a total of 921,000 acres.

up to 45 years. We were not able to obtain costs, as only 869 acres had been enrolled as of 1989, and USDA anticipates little further use of the program.

As figure 3.1 indicates, the number of acres farmers and other small woodland owners contracted to plant and seed annually under the three major assistance programs (ACP, FIP, and CRP) rose from 479,000 acres in 1986 to 976,000 acres in 1987 and declined to 813,000 acres in 1988.

Figure 3.1: Volume of Tree Planting and Seeding Under USDA Assistance Programs, 1986-88



Source: Agricultural Stabilization and Conservation Service

Planting and seeding contracted by farmers and other small woodland owners under these programs for 1987 was higher than the 1986 level by 497,000 acres. For 1988, it was higher than the 1986 level by 333,000 acres. Thus, plantings and seedings for both years together exceeded the 1986 level by a total of 830,000 acres. This composed most of the 921,000 acres, referred to on page 11, by which total plantings and seedings nationally for these years exceeded the 1986 level.

As a result, the share of the nation's total planting and seeding that was done under these programs increased from 17 percent in 1986 to 24 percent in 1988. Forest Service staff told us that the CRP program, in particular, which was created as part of the Food Security Act of 1985, will be the largest publicly sponsored tree planting program in the nation's history.

SECTION 4

INCOME TAX PROVISIONS AFFECTING THE TIMBER INDUSTRY

Timber has long been classified in tax law as a capital asset used in a trade or business. Income from timber sales is now taxed at ordinary income tax rates, a maximum effective rate of 28 percent for individuals and 34 percent for corporations. Timber growers may elect to (1) recognize income when trees are cut rather than upon the sale of the timber and (2) report income on a cash or accrual basis.

Two special rules apply to reforestation expenses. One allows for amortizing up to \$10,000 of reforestation expenses annually over an 84-month period. The other provides a 10-percent investment tax credit for reforestation expenditures.

Indirect timber production expenses are exempt from uniform cost capitalization rules that require a broad range of costs to be capitalized, or added to the basis of goods sold, rather than currently deducted. As a result, most indirect costs incurred after establishing a stand of trees are deductible currently in a fashion similar to maintenance expenses. Finally, certain publicly traded partnerships with significant income from timber sales are exempted from corporate tax treatment.

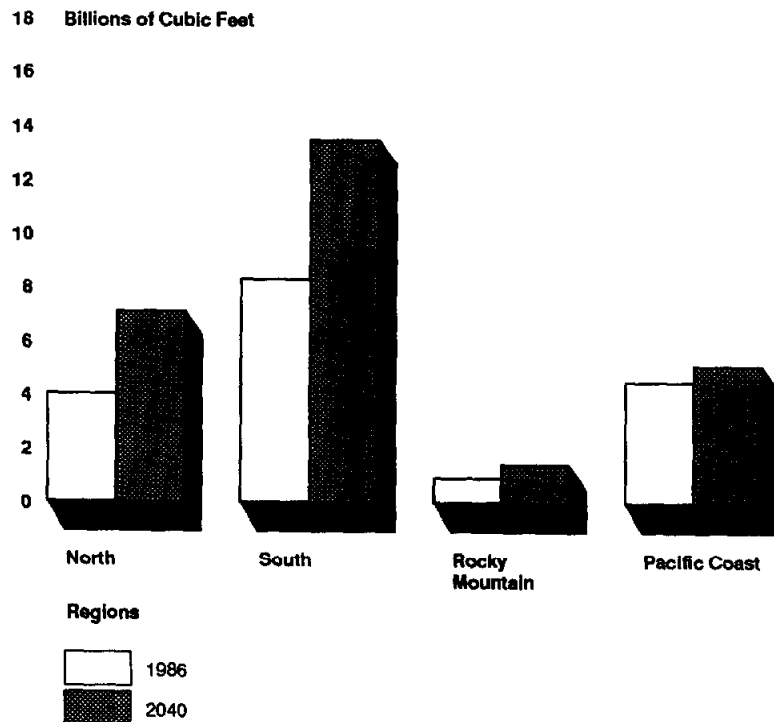
Other general tax code provisions affecting all industries, including the timber industry, limit the deductibility of losses from nonactively managed timber stands and specify depreciation write-off periods for capital assets such as equipment and structures.

IMPACTS ON FEDERAL REVENUES

The Joint Committee on Taxation has, at various times, estimated the impacts on federal revenues of some, but not all, of these provisions. Last year, it estimated that the amortization of reforestation expenses and the related investment tax credit would reduce federal revenues by \$400 million for the 5-year period from 1990 through 1994. Allowing the deduction of timber growing expenses after establishing a stand of trees rather than capitalizing them was estimated to reduce federal revenues by \$1.9 billion over this same period. Accordingly, these two provisions reduce federal revenues by \$460 million per year.

the nation. The South will have increased its top-ranked share of the nation's total timber harvest from 47 percent in 1986 to 50 percent in 2040, and the North will have increased its share from 23 percent to 26. The Pacific Coast's share of the national harvest is projected to decline from 25 percent to 19 percent, while the Rocky Mountain regional share remains stable at 5 percent. The reason for these shifts is a relative decline in supplies of softwoods from private lands in the West, coupled with increased supplies of eastern hardwoods over the period.

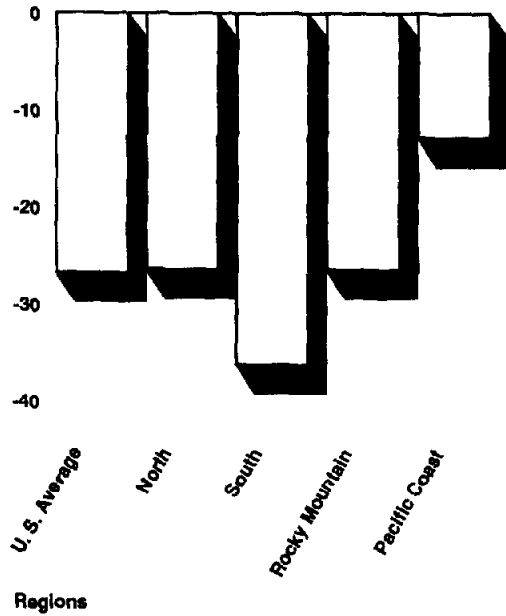
Figure 5.2: Projected Changes in Regional Timber Harvesting Volumes, 1986-2040



Source: Forest Service.

Figure 6.1: Projected Decreases in National and Regional Timber Industry Employment, 1985-2040

10 Percentage Decline in Employment



Source: Forest Service.

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DEFINITIONS OF REGIONS USED IN THIS REPORT

Except as otherwise noted, the regional grouping of states used for harvesting and employment data in this briefing report is that used by the Forest Service in its report An Analysis of the Timber Situation in the United States: 1989-2040, (Draft), Washington, D.C., 1989. It is as follows:

NORTHERN STATES

Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin

SOUTHERN STATES

Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia

ROCKY MOUNTAIN STATES

Arizona, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Utah, and Wyoming

PACIFIC COASTAL STATES

Alaska, California, Hawaii, Oregon, and Washington

SECTION 6

NATIONAL AND REGIONAL TIMBER INDUSTRY EMPLOYMENT ARE PROJECTED TO DECREASE FROM 1985-2040

Although harvests are projected to increase substantially by 2040, the Forest Service has projected that timber industry employment is expected to decline considerably over this period because of labor productivity gains due to mill renovations. However, the rate of decline is expected to vary by region.

As figure 6.1 shows, despite anticipated harvest increases, the Forest Service has projected that by 2040, national timber industry employment will generally fall about 27 percent from its 1985 level.¹ The rate of employment decline is expected to be the greatest in the South, at 36 percent. The rate of decline in the North is expected to be lower, at 23 percent. For the Pacific coastal and Rocky Mountain states, projections of future employment are available only for the lumber and wood products sector of the timber industry (which made up three-fourths of industry employment there in 1985), and are expected to decline by 13 percent and 26 percent, respectively. Projections of employment in the remaining one-fourth of the industry in those regions are not available.

¹This does not include employment in the pulp and paper products sector of the industry in the Rocky Mountain and Pacific Coastal regions, which was not projected.

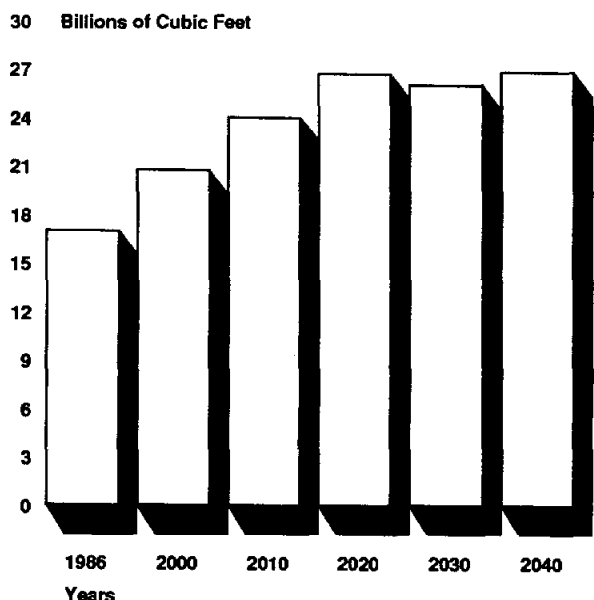
SECTION 5

NATIONAL AND REGIONAL TIMBER HARVESTING ARE PROJECTED TO INCREASE FROM 1986-2040

Timber harvesting nationally is projected to increase significantly by the year 2040. However, shifts are expected in different regions' rankings as producers because of relative timber supply declines in some areas.

As indicated in figure 5.1, the Forest Service has projected that timber harvesting nationally will increase by 55 percent between 1988 and 2040 (from 17.56 billion cubic feet to 27.17 billion cubic feet).¹

Figure 5.1: Projected Volume of National Timber Harvesting, 1988-2040



Source: Forest Service.

The latest year for which regional harvest data were available was 1986.² As figure 5.2 shows, the Forest Service projects that between then and 2040, the South and North are expected to experience large relative increases in harvest volumes, with the North overtaking the Pacific Coast as the second-ranking region in

¹Includes the 48 contiguous states only.

²For definitions of regions, see app. I.

Payments for planting and seeding under these three assistance programs increased from \$23.6 million in 1986 to \$38.5 million in 1987, and then declined slightly to \$36.9 million in 1988.

SECTION 3

FEDERAL ASSISTANCE PROGRAMS PLAYED A MAJOR ROLE IN INCREASED TREE PLANTING AND SEEDING

Most of the increase in national tree planting and seeding that occurred in 1987 and 1988 was composed of a large increase in trees planted or seeded under financial assistance programs administered by the U.S. Department of Agriculture (USDA). The share of the nation's planting and seeding done under these programs increased from 17 percent in 1986 to 24 percent in 1988.

USDA's Agricultural Stabilization and Conservation Service (ASCS), and Farmers Home Administration (FmHA), with technical assistance obtained through the Forest Service and State Foresters, administer four programs to assist farmers and other small landowners in tree planting and seeding:

- The Agricultural Conservation Program (ACP) is an environmental conservation program under which ASCS makes payments to owners of small woodland tracts to conserve water, reduce erosion, improve wildlife habitat, and develop timber resources. Most trees under this program are planted on harvested timber lands. Payments in fiscal year 1988 totalled \$8.1 million for planting trees on 156,170 acres.
- The Forestry Incentives Program (FIP) is designed to enhance timber generation on promising land through ASCS cost-sharing payments to private landowners for tree planting. Most trees under this program are planted on harvested timber lands. Payments in fiscal year 1988 totalled \$9.3 million for planting trees on 157,410 acres.
- The Conservation Reserve Program (CRP) is an acreage reduction program designed to encourage conversion of more erodible cropland to vegetative cover, including merchantable timber, for 10 years through ASCS land rental and cost sharing payments to farm owners. However, trees under this program may not be planted on harvested timber lands, but only on lands that had been planted in other crops. Payments in fiscal year 1988 totalled \$19.5 million for planting trees on 499,076 acres.
- The Softwood Timber Program is a debt relief program allowing FmHA to make loans for tree planting and to reamortize distressed farmer program loans with anticipated future revenues from resulting softwood timber crops planted on former cropland or pasture. Payments may be deferred until the softwood timber crop produces revenue or

SECTION 2

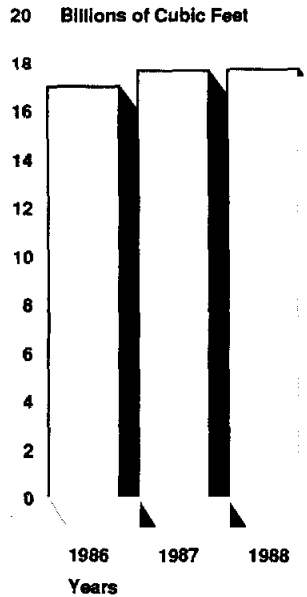
TIMBER HARVESTING AND PLANTING AND SEEDING
HAVE INCREASED SINCE 1986

According to data from the Forest Service, timber harvesting and planting and seeding have increased since 1986. These increases reflected a continuation of generally upward trends for harvesting and which date back about 35 years for harvesting and about 45 years for planting. We did not assess any causal factors related to these increases.

NATIONWIDE TIMBER HARVESTS, 1986-88

As figure 2.1, below, indicates, timber harvesting increased 4 percent nationwide from 1986 to 1988 (going from 16.96 billion cubic feet in 1986 to 17.66 billion cubic feet in 1988).

Figure 2.1: Volume of National Timber Harvesting, 1986-88



Source: Forest Service.

SECTION 1

INTRODUCTION

BACKGROUND

The latest data available from the Forest Service indicate that in 1986, timber was the nation's number one agricultural crop, composing about one-fourth of the total value of all major agricultural crops. Timber also ranked in the top three manufacturing industries in most regions of the country. It was most important, however, in the southern and Pacific coastal states, which accounted for 47 percent and 25 percent, respectively, of the nation's total timber harvest by volume in 1986, and for 45 percent and 41 percent, respectively, by value.

In 1986, about 50 percent of the nation's annual timber harvest, by volume, was obtained by forest products firms from private farmers and other small individual woodland owners who comprise the predominant forestland ownership group in the eastern United States. Lands owned by forest products firms themselves, located in all timber-producing areas of the nation, produced about 30 percent of the harvest. National forests and other public holdings, located principally in the western United States, supplied the remainder of approximately 20 percent.

Over the years, various tax provisions and timber assistance programs have been enacted to increase the attractiveness of long-term investments in timber, in order to ensure that the nation maintains adequate timber supplies.

OBJECTIVES, SCOPE, AND METHODOLOGY

On October 24, 1989, Representative Sander M. Levin requested that we identify certain data on the timber industry and its future prospects as well as on federal assistance programs and tax provisions affecting it. As agreed with his office, our objectives were to answer the following questions:

1. How did timber harvesting and planting and seeding levels change from 1986-88?
2. What were the impacts of federal timber assistance programs, and what were their costs from 1986-88?
3. What federal income tax provisions currently apply to the timber industry, and what are their impacts on federal revenues?
4. What future changes are expected in timber harvesting levels nationally and by region from 1986-2040?

CONTENTS

		<u>Page</u>
LETTER		1
SECTION		
1	INTRODUCTION	6
	Background	6
	Objectives, Scope, and Methodology	6
2	TIMBER HARVESTING AND PLANTING AND SEEDING HAVE INCREASED SINCE 1986	8
	Nationwide Timber Harvests, 1986-88	8
	Nationwide Tree Planting and Seeding, 1986-88	9
3	FEDERAL ASSISTANCE PROGRAMS PLAYED A MAJOR ROLE IN INCREASED TREE PLANTING AND SEEDING	10
4	INCOME TAX PROVISIONS AFFECTING THE TIMBER INDUSTRY	13
	Impacts on Federal Revenues	13
5	NATIONAL AND REGIONAL TIMBER HARVESTING ARE PROJECTED TO INCREASE FROM 1986-2040	14
6	NATIONAL AND REGIONAL TIMBER INDUSTRY EMPLOYMENT ARE PROJECTED TO DECREASE FROM 1985-2040	16

Q: What future changes are expected in timber harvesting levels nationally and by region from 1986-2040?

A: The Forest Service projects that the national timber harvest will increase about 55 percent over the next 50 years, with shifts taking place in different regions' shares due to changes in their relative supplies of available trees. (See sec. 5 for further details.)

Q: What future changes are expected in timber industry employment nationally and by region from 1985-2040?

A: Despite anticipated harvest increases, the Forest Service projects that national timber industry employment will generally fall about 27 percent over the next 50 years, chiefly because of labor productivity gains due to mill renovations. This decline is projected to vary considerably by region. (See sec. 6 for further details.)

Section 1 provides background information on your request and discusses our scope and methodology. In conducting our study, between December 1989 and January 1990, we relied primarily on Forest Service and Agricultural Stabilization and Conservation Service (ASCS) data. Because of the limited time available to conduct our study, we did not verify the accuracy of these data nor evaluate the effects of Agriculture's assistance programs or tax provisions on the timber industry. We discussed the information in this briefing report with Forest Service and ASCS officials, who said it was fair and accurate.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the appropriate House and Senate committees; interested members of Congress; the Secretary of Agriculture; and the Director, Office of Management and Budget. Copies will also be made available to other interested parties who request them. Should you need further information, please contact me at (202) 275-5138.

