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# Increment Contracts: Southern Experience And Potential Use in the Appalachians

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ABSTRACT—Increment contracts are long-term timber management contracts in which landowners receive regular payments based on the average annual growth of wood their land is capable of producing. Increment contracts have been used on nearly 500,000 acres of private forests in the South. Southern experience suggests that several changes in the contract would improve its utility: the contract period should be shortened, the percentage of annual growth used to determine payments to landowners should be re-

duced, and payments should be based on published stumpage or product price reports. With these changes, there would be opportunities for, and benefits of, using increment contracts in the central Appalachians. In the near future, increment contracts may be used in parts of the Appalachians where competition for stumpage is keen.

 ${f T}$ his article reports experience in using increment con-

tracts and assesses their potential usefulness in the central Appalachian region. The increment contract was developed and has been used mainly in the southern pine region. It has features that distinguish it from forestland leasing and management arangements already in use in Appalachia. Greene (1979) noted that the increment contract is neither a conventional timberland lease nor a cutting contract. Rather, the woodland owner receives yearly payments based on the average annual growth of wood that the land is capable of producing under management. The woodland's growth potential is assessed before the contract is made; annual payments are then calculated by applying specified stumpage prices to a given percentage of the expected annual growth.

### Interviews

Specific study objectives were to define the key distinguishing provisions of the increment contract; assess its practical advantages and disadvantages, based on experience; assess prospects for its use in the central Appalachian region; and suggest modifications in its format to make it suitable for the region.

Because there was little information relevant to the study objectives in the literature, our primary method of investigation was interviewing. Fourteen individuals who had experience with increment contracts or who were familiar with the industry-landowner relationship involved in formal contracting were interviewed. Interviews were conducted in three stages:

- 1. Defining the exact provisions of increment contracts and how they differ from other timber lease forms, and documenting experience in using them. A USDA Forest Service researcher who is expert in contractual and legal aspects of forest management was interviewed to obtain part of this information, and to verify published information. Additional information was obtained by interviewing four industry officials with experience in negotiating and executing increment contracts in the South.
- 2. Determining reactions of the forest industry to the prospects of using increment contracts in the central Appalachian region. The contract was explained to interviewees, and they were asked to compare it with contract arrangements currently used in the region. Six industry representatives were interviewed, representing firms in Pennsylvania, West Virginia, Virginia, and North Carolina. (Firms in Virginia and North Carolina were those with operations in the Piedmont region of the states. These firms were selected to represent a transition between the southern pine region and the central Appalachian hardwood region.)
- 3. Assessing attitudes toward increment contracts of forest landowners in the study region. This was done by interviewing three West Virginia consulting foresters, who work with and represent many landowners in forest management and timber harvesting matters.

## Comparisons

Greene (1979) compared the key features of the increment contract with those of other major long-term timber management contracts. He noted that the main distinction of an increment contract is in the method of paying for timber harvested from the landowner's property. Payments are made regularly throughout the contract period, based on the average annual growth of wood that the land is expected to produce under management. The productive capability of the land is estimated before the agreement is

made, using criteria such as site index, species composition, and stocking. A per unit product price is contracted and then quarterly or annual payments are made to the landowner during the contract period, based on a specified percentage of the estimated annual growth potential. These payments are made whether or not any timber is harvested in a given year, and the balance (payment credit) is carried forward on the account. When harvests are made, their value is debited against the account balance; if harvests exceed accumulated credits, the landowner is paid for the "excess" harvest and the account is brought to zero balance. Thus the woodland owner gains a regular income, with the possibility of extra payments if harvests exceed accumulated credits at any time.

Our study confirmed Greene's report that increment contracts, as used in the southern pine region, have other important features:

- Unit prices of timber are established at the beginning of the contract period, with provisions for adjustments based on changes in the U.S. Department of Commerce producers price index.
- Prepayments have generally been set at 65 to 75 percent of the value of the calculated average annual growth.
- Contract periods are long, typically 60 years or more.
- Contract language clearly allows the landowner to retain economic interest in the timber until it is cut, so that income qualifies more fully for capital gains treatment than is common under some forms of timber lease.

The increment contract's payment system and other common provisions yield several benefits to woodland owners. The period between investments in woodland management and returns on them is greatly reduced; income is regular and continuous over the contract period; professional timber management is provided at no cost to the landowner; landowners are guaranteed a market for their timber; and other objectives of forest ownership can be protected by suitable clauses in the contract (Greene 1979).

## Southern Experience

Increment contracts were originally developed by firms that sought to establish or expand wood products manufacturing in the South, but which had limited capital to purchase timberland. The firms devised increment-based cutting contracts to secure long-term managerial control of private woodlands. Information provided by four firms interviewed indicated that by 1980 increment contracts had been used to bring nearly 500,000 acres of nonindustrial private forests under industrial management in Alabama, Florida, and Louisiana.

At the time of our study, the firms interviewed had discontinued negotiating other increment contracts and were purchasing additional timberland instead. With increased capital, the firms have generally built relatively

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safe timberland bases. However, firms that have used the increment contract still consider it a useful form of timberland control, and they will continue to use it under certain circumstances. If owners of particularly desirable tracts are unwilling to sell and are uninterested in other leasing arrangements, the increment contract will be offered as an alternative. Large tracts, preferably 500 acres or moreand those that help consolidate company-owned lands-are considered especially well suited for increment contracts.

Normally, increment contracts negotiated in the South specify initial prices for pine pulpwood only, and provide for periodic price adjustments based on the producers (wholesale) price index. Confusion and disputes have occurred when products other than pine pulpwood have been harvested, and when changes in pulpwood prices have not matched the general price index. Southern forest industry personnel interviewed suggested that these problems can be avoided by establishing initial unit prices for all types of timber products that might be harvested under a contract. and providing for price adjustments during the contract period based on published timber product price reports, rather than a general economic index. (Local market reports were not available during the time when increment contracts were developed, but now are published regularly in the South). These changes would reduce contract disputes and administration expenses.

Another useful change would be to shorten the contract period to 30 years or so, from the traditional 60 to 90 years. Shorter contract periods would simplify early negotiations with landowners and would be more attractive to owners who foresee eventual alternative uses for their land.

### Central Appalachian Region

Interviews with industrial and consulting foresters in the central Appalachian region were used to assess prospects for future use of increment contracts in the region.

We found that the provisions for guaranteed annual payments would be attractive to nonindustrial woodland owners. Interviewees felt that owners of smaller woodlands often fail to manage them because they cannot afford the investments required to manage timber. Those owners who have sufficient capital to make investments often fail to do so because they are discouraged by timber's low profit potential. Avoidance of direct management costs, and capital gains treatment of income, could help owners gain a higher rate of return from their timberlands.

Industry personnel preferred large tracts with a high volume of merchantable or near-merchantable timber for increment contracts. Interviewees said that, generally, tracts of 500 acres or more are needed for a viable contract. Because the average tract size in the Appalachians is substantially smaller, many private ownerships would be considered undesirable.

But tract size is not the only determinant of good contract land; a forest's age, quality, merchantable volume, and accessibility are also important considerations. Industry personnel said that desirable, contiguous small properties could be combined under common management by way of increment contracts.

Many woodland owners in the Appalachians, especially those owning small tracts, have had no experience in longterm timber contracts. Interviewees judged that the increment contract's combination of regular payments and assured market for timber would interest these owners.

Key changes in the increment contract would make it more practical for both forest products firms and landowners in the central Appalachian region. Industry representatives said that the percentage of the mean annual increment used to determine the minimum annual payment should be reduced to 50 or 60 percent. This would lower the contracting firm's carrying costs on prepayments, provide a margin of safety against damage to standing timber, and reduce the risks in predicting growth of hardwood timber.

Contracts should establish unit prices for all potential timber products at the beginning of the contract period, subject to periodic adjustments based on published stumpage and product price reports (rather than a general price index). Interviewees felt that this would be clearer and fairer to both sellers and buvers and would minimize chances of contract disputes.

Both industrial and consulting foresters expressed a preference for contract periods substantially shorter than those used in the South. Thirty to forty years was judged suitable for Appalachian conditions. Shortened contract periods would be more feasible and acceptable to both landowners and wood products firms, the interviewees felt.

In the near future, increment contracts may be used in parts of Appalachia where there is keen competition for timberland and stumpage, because the contract is attractive and advantageous to the forest landowner. In northern Pennyslvania, many firms compete for preferred species and grades of sawtimber; competition for pulpwood is also keen. Firms in the area are seeking ways to increase wood supplies from nonindustrial forest holdings. The increment contract could be useful in securing such supplies. One firm in the area has begun to study the feasibility of various long-term timberland contracts; a representative said that the increment contract would be included in the investigation

Similarly, wood products firms in Virginia and North Carolina are beginning to increase their use of formal agreements with woodland owners. Competition for wood has led one firm to offer landowners a long-term management arrangement similar to the increment contract. Other firms contacted during the study were unfamiliar with the increment contract, but they indicated that it would be evaluated and possibly included as an alternative to their present long-term agreements.

Lack of keen competition for timber in West Virginia will likely result in little use of the increment contract in the foreseeable future. Only a few large wood products companies operate in the state and only one company draws much pulpwood from it. Thus traditional wood procurement strategies continue to be favored by industry in the state.

## Literature Cited

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