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I am submitting herewith a thesis written by Joe D. Lovelace entitled "An Evaluation of the 1974 Forestry Incentives Program in Twelve East Tennessee Counties." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Forestry.

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AN EVALUATION OF THE 1974 FORESTRY INCENTIVES PROGRAM IN TWELVE EAST TENNESSEE COUNTIES

A Thesis

Presented for the

Master of Science

Degree

The University of Tennessee

Joe D. Lovelace

December 1975

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And to my wife, Marie, who gave me encouragement when the going got rough, I give my love.

ABSTRACT

In order to evaluate the effectiveness of the 1974 Forestry Incentives Program (FIP), interviews were conducted with Agricultural Stabilization and Conservation Service (ASCS) county executive directors, district foresters, area foresters, and FIP applicants in 12 East Tennessee counties. Administrator questionnaires were designed to determine the extent of FIP activity in the various administrators' areas of responsibility; the administrators' knowledge of FIP and its procedures; attitudes and opinions which influenced administrators; and administrative problems that occurred. Applicant questionnaires were designed to learn the applicants' characteristics, past land management practices, FIP accomplishments, and problems that prevented project completions.

FIP was not successful in the study area. Less than 1% of the eligible landowners applied for assistance. Completed projects affected slightly more than 100 acres and comprised just 28% of the approved applications.

FIP had numerous inherent problems that retarded its effectiveness. Tennessee made no provisions to directly assist landowners in completing their projects. A ten-acre minimum tree planting requirement in Tennessee prevented several applications from being approved for FIP. Maximum cost-sharing rates set by the state were often substantially inadequate. ASCS had no established procedure for screening applicants; therefore, many ineligible owners were enrolled

in FIP, and administrative duties were unnecessarily increased.

Disinterest in forestry by ASCS county executive directors and Extension Service county agents appeared to be the outstanding administrator problem that reduced FIP success. These personnel often promoted non-forestry programs and neglected FIP. Another administrator problem was limited understanding of the program, caused by the program's newness and numerous amendments. Foresters often could not efficiently administer their areas due to a heavy workload.

Landowners faced financial difficulties and problems of allocating their time to work on their projects. The compounded problems of the high percentage of absentee-owner applicants also prevented many project completions.

Suggestions were offered to aid improvement of the Forestry Incentives Program and similar programs that may be developed in the future. These suggestions include the following:

1. start the program early in the year;
2. adjust and regulate cost-shares;
3. provide state labor assistance and promote vendor services;
4. increase the forestry-awareness of extension agents and ASCS county directors;
5. improve communications.

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I. INTRODUCTION

A. The Forestry Incentives Program

The Agriculture and Consumer Protection Act of 1973 (Public Law 93-86) created the Forestry Incentives Program (FIP) to help insure adequate future timber supplies. FIP's purpose is to encourage timber production on private, non-industrial land by providing cost-sharing funds and technical assistance for tree planting and stand improvement.

Ten million dollars were appropriated in late spring, 1974, for distribution to designated counties in all 50 states. Funding allocation and county designation formulation encompassed commercial forest acreage, the number of private, non-industrial owners, potential site productivity, and the need for forestry practices. The South received most of the funding, with $6.9 million going to the 13 southern states.

Administration of FIP is a combined effort of several governmental agencies. The U.S. Forest Service provides technical services, determines practice specifications, establishes priority, and encourages private enterprise. The Agricultural Stabilization and Conservation Service (ASCS) administers the funds and landowner agreements. State forestry departments certify landowner eligibility, prepare and approve management plans, provide the landowner technical assistance, and certify practice completion. Other agencies, such as the Soil Conservation Service and, especially, state extension services, publicize FIP and recruit participants.

FIP can be tailored to meet individual state needs through modification of the basic guidelines by state ASCS committees. For example, the Agriculture and Consumer Protection Act defines an eligible owner as any individual, group, association, or corporation owning not more than 500 acres and not regularly engaged in the business of forest products or public utilities; but Tennessee allowed ownership to exceed 500 acres if it was not in one "operating unit." The landowner is required to have a management plan and to have made no commercial cuttings, except salvage, species conversion, or regeneration of unproductive stands, within the past five years. Cost-share rates are between 50% and 75% of the actual cost, with any landowner receiving a maximum of $10,000 annually ($2500 in 1974).

Tennessee received an initial allocation of $437,000; $225,000 was apportioned to the designated counties, $37,000 was held in state reserve, and $175,000 in federal reserve. Money not used by a county would be returned to the state reserve for re-distribution. If warranted, funds would be withdrawn from the federal reserve and from the reserve of states not using their appropriation.

II. ASPECTS OF FORESTRY ASSISTANCE PROGRAMS

A. The Present Timber Supply Situation

The United States has approximately 500 million acres of commercial forest land[1], which accounts for nearly one-fourth of the total land area. Over half of this land (59%) is in small private, non-industrial ownerships, and nearly half of this (26% of the total) is in farm ownerships. The greatest concentration of commercial forest land, over 192 million acres, is in the South (70). The South also produces about half the net annual timber growth of the United States.

The past three decades have been a period of rapid increase in demands for timber products (a 65% increase from 1942-1972); this trend is expected to continue (70). A 100% increase of softwood supply is predicted as necessary for meeting demands by the year 2000 (17). The increased consumption has been complicated by a net loss of commercial forest - 8.4 million acres since 1962 (39) - and the growth rate increase has not kept pace with the demand increase (70). Better fire control, harvesting and regeneration procedures, and timber stand improvement have improved per acre production and yield, and they should continue to do so into the future. However,

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[1]Commercial forest land is defined as land "producing or capable of producing usable crops of wood, economically available now or prospectively, and not withdrawn from timber utilization." (71).

many competing land uses, such as agricultural cropland, new reservoir impoundments, and expansion of the Wilderness System, either limit or prohibit timber management. Additionally, much land removed from the commercial forest acreage has been well-stocked, while land reverting to forest must be regenerated, adding to the short-term supply problems (17).

Many authorities see the 296 million acres of privately owned non-industrial forest land as the primary hope for the future. These farm and "miscellaneous" owners control a majority (59%) of the land, but only 39% of the growing stock, and their lands are producing at less than half potential (17, 39). The small ownerships (less than 5000 acres) are in the worst condition of any ownership class.

The combined acreage of farm and miscellaneous ownerships has remained relatively stable since 1952, with the miscellaneous group of owners gaining approximately the same amount lost by farmers (70). This stability could be beneficial to forestry were it not that many non-farmer owners are often directed by factors other than the profit-motive. For them, the land represents a vacation home, provides recreational opportunities or a "wilderness experience," or possibly pride of owning the land is an end in itself (47). An estimated 90% of the non-farm "miscellaneous" New England and Mid-Atlantic states have no desire for commercial timber production, but they own over 60% of the commercial forests (17). This pattern can be extrapolated to non-farmer owners in other sections of the country, although possibly not to the same degree.

B. Value of Assistance Programs

McKillop (40) believes social benefits gained through successful incentives programs are important reasons for establishing such programs. Locally, intensified management activities provide more work for forest laborers and a greater timber supply for local markets. Nationally, the increased timber supply will have a dampening effect upon prices, saving consumers an estimated $58 million on wood and wood-substitutes in the year 2000. There will be less need to import wood products, and we can export more, maintaining the balance-of-payments. Intensified management on highly productive private lands will permit other forest uses on marginal national forest land. Most wood products require less energy and many cause less pollution in manufacture than wood-substitutes.

The foremost goal for successful incentives programs is to increase the timber supply to meet expected demands and improve the previously discussed supply outlook. Private, non-industrial lands for which incentive programs are designed possess the greatest improvement potential to provide future supplies.

The long investment period and low rate of return prevalent with most forestry practices discourage many landowners from implementing forestry programs (58, 79). Cost-sharing funds reduce personal landowner expenses, thereby minimizing some of the investment uncertainties (40).

Landowners often lack basic skills necessary to successfully carry out forest practices. Technical assistance available through incentives programs enables the landowner to learn, or at least be directed

toward, proper techniques of site preparation, planting, and stand improvement (79). The information and assistance the landowner received may educate him that timber management does not necessarily exclude other forest uses, possibly increasing his receptiveness to forestry programs.

C. Examples of Incentives and Assistance Programs

Numerous forestry incentives programs are presently being managed by federal and state governments and private industry. Federal programs, such as the Rural Environmental Conservation Program, are usually conservation-oriented (67). Their primary goal is to improve or protect the environment, rather than produce timber for consumption; this, however, is often an additional benefit.

State incentives programs, on the other hand, are often similar in scope to FIP. Two such programs, Virginia's Reforestation of Timberlands and the Forest Resource Development Act of 1974 in Mississippi, share many of FIP's goals and procedures (22, 27, 52, 61). Both strive to increase timber production on private, non-industrial ownerships by making forestry more profitable to the owner and providing necessary assistance. Virginia'a program has proven successful since its inception in 1970; the program in Mississippi was started with FIP and an evaluation was not available at this time. State incentives programs show promise, with sufficient legislative and industrial support, as complements to federal programs.

Industrial incentives programs are more accurately labeled "assistance" programs. Landowners receive no direct subsidy from the company, but they do receive technical assistance, labor, supplies and fire protection at company cost; management advice is usually provided with no charge. In return, the company receives first option to purchase the mature timber (11, 12, 13, 14, 49). The stated objectives of these programs are to increase both the total national timber supply and the resource base of the company by making forestry profitable to small-tract owners.

D. Evaluation of Assistance Programs

Relatively few studies evaluating public forestry assistance programs have been conducted. Most landowner studies center on owner problems related to either the practice of forestry or marketing of timber. Also, most program research has been on conservation programs (programs directed toward improving the environment or removing land from crop production), rather than timber production programs such as FIP. These studies, however, analyze previous programs and can aid understanding of FIP activity.

Types of Assistance Programs

Muench (45) classified forestry assistance programs into income redistribution programs and timber production programs. Income redistribution programs strive through price supports or payments for conservation practices to increase income of the agriculturally employed sector of the population. Muench suggested the low rate

of return and long investment period with forestry hindered success of these programs. He did indicate, however, some may be useful, but only with quality species, fertile sites, and good markets. Programs with a timber production goal, like FIP, make up the second group of programs. Muench said they often fail to affect the basis of the small woodland management problem -- rural poverty. Many small landowners are not able to invest in forestry, even with financial assistance. Also, much unmanaged land is in areas of poor timber markets. To fully succeed, the owner's asset position and the market situation must be improved before the timber management problem should be attacked.

Contribution of Assistance Programs

The contribution of assistance programs to forestry needs has been generally small. Mendel (41) found the Agricultural Conservation Program in southeastern Ohio annually contributed 0.2% of the estimated needed stand improvement and 0.4% of the planting. Only 1.7% of the owners annually used the program, accounting for just 6.7% of all ACP expenditures. Benson and Skok (6) determined the Soil Bank program contributed little forest acreage in central Minnesota and was an expensive planting inducement. Boardman (7), however, found the Soil Bank made a valuable contribution to the timber supply in southeast Tennessee and was considered worthwhile by most participants.

A major problem found by some researchers is that a high proportion of plantations established by various programs have not reached maturity. Williston and Dell (75) found only 8,005 acres

remaining in 1959 of 22,575 acres reforested between 1934 and 1942 by the Civilian Conservation Corps. Similarly, Williston (74) found 15% of 66,095 acres of plantations planted for the Yazoo-Little Tallahatchie Flood Prevention Project destroyed after 15 or more years. The Tennessee Soil Bank program showed more encouraging results than in other areas with only 11% of the plantations cut after 12 to 16 years (7).

Justification of Public Programs

Some researchers question even the justification for federal incentives programs and their scope. Skok and Gregersen (58) discussed four assumptions necessary to justify public expenditures for forestry programs. Two assumptions, a need for greater timber production to meet future demands and the under-productivity of private lands, are well accepted and have been discussed previously. They said the third assumption (it is more efficient to spend on private than public or industrial lands) is unfounded. More economic research needs to be conducted into incentives programs. The final assumption stated that more social good will comes from expenditures on private rather than public lands. Skok and Gregersen point out that this is true only on economically productive land. They also cite studies showing that 70% of the participants in Minnesota's 1972 REAP program would have planted with less funding, and that 50% in Michigan would undertake a practice with no funding. Skok and Gregersen question whether existing programs can be reduced without seriously affecting their results.

Needed Program Revisions

Assistance program goals should more strongly influence program administration. Manthy (34) stated more social returns would result from public investments if only high-return yielding projects were emphasized. He gave three guidelines for timber production programs. First, concentrate efforts in areas where owner accomplishment is usually high. Second, discourage projects with a high degree of uncertainty. This uncertainty may result from poor site characteristics or landowner factors which may prevent timber maturation (such as a desire to sudivide). Third, small-sized projects should be discouraged due to high harvest costs and lower stumpage prices.

Assistance programs have been found deficient in administrative funding. FIP, for example, does not provide funding for expansion of facilities, such as nurseries, needed to meet rising demands created by the program (77). Without some assistance, a state may be unable to independently finance such projects, jeopardizing the future of the program. Benson and Skok (6) found that a shortage of planting stock during the Soil Bank Program delayed nearly 75% of the participants in central Minnesota.

Assistance programs should stress stand improvement and pre-commercial thinning more than planting. Mills (44) based this belief on the amount of land reverting to other uses before timber maturity. Much of the remainder never receives intermediate work and does not contribute to the timber supply. Williston and Dell (75) found 19% of the forested acreage remaining from the Civilian Conservation Corps plantations needed release.

Peterson (50), a landowner, said incentives are necessary, but many owners were hindered by FIP restrictions. He believes any owner, regardless of the size of his holding, should be allowed to participate; large areas of non-profitable land create burdens for their owners and incentives payments can help alleviate them. He suggested that large tracts be given FIP credit for up to the 500 acre limit; Tennessee has met this problem by dividing large ownerships into "operating units" (64).

Additional research with small forest tracts has found several reasons for poor forest management, many of which are not cured by incentives programs. Worley's study in two eastern Kentucky counties found low income and lack of owner education to be major forest management obstacles (78). He felt landowners needed to be taught the income potential of their land. Mignery (42) found ignorance and urgent money needs to cause exploitative cutting. Most incentives programs do little to improve this situation. One-time cost-sharing or "at cost" assistance can little aid the owner who cannot afford to pay his percentage or have long-term investments. Pamphlets cannot explain the advantages of forestry to owners unable to comprehend or appreciate the principles involved. Some researchers have found disinterest to be prevalent among owners not practicing forestry (36, 48). Incentives payments may motivate some landowners, but often the long investment period or alternative land uses take precedence (38, 42). Mills (44) feels owner constraints, such as poor technical knowledge, financial difficulties, and alternative investments, may be initially overcome by assistance programs; these problems, however, often arise later.

III. THE RESEARCH

A. Objectives of the Study

Since 1974 was the first year of the Forestry Incentives Program, the author was interested in both the difficulties of new program administration and the program's success in Tennessee. Research was directed toward the following objectives:

1. evaluate FIP's effectiveness after one year;
2. determine administrative problems which developed;
3. classify the participants according to various characteristics;
4. estimate FIP project results for each participant;
5. suggest improvements for FIP and similar programs.

Preliminary reports suggested FIP met with poor success in Tennessee during its first year. The first year of any program is crucial to its survival. Local failure jeopardizes future funding to local administrative agencies; widespread failure can result in total revocation of the program. If FIP is to continue in Tennessee, or the nation, there must be sufficient progress toward maximizing the private sector's contribution to the timber supply to justify federal expenditures.

Administrative problems within FIP could greatly affect the program's success. Many resources vital for FIP to obtain its goal lie with the administrators. Anything affecting administrative performance, whether it is within or outside the program's legislated

framework, affects FIP's results. The author wished to learn which problems were due to the newness of the program and which were due to other factors, such as administrator efficiency and attitudes toward forestry.

The author also wished to learn the characteristics of participating owners, project results, and complaints. Participation is prerequisite to program success, and knowledge of past participants can often be used to increase future participation. Many facts learned about applicants can be used to improve the program. Knowledge of the participants' age, income, education, and similar characteristics tell what kind of owner used the program and can be employed to increase this participation or change the program to attract a broader field of applicants. Participants' attitudes about FIP can be used to increase administrative efficiency. Knowledge of their results and reasons for their success or failure can aid program improvement.

Finally, the author hoped to combine the findings of the first four study objectives and suggest ways to improve FIP. Few programs originate in their final form and FIP, if it continues, will probably be changed many times. For this reason, administrators need as much research as possible into the program's difficulties. The author believes the results of this project can be beneficial to administrators as they seek to improve a necessary program.

B. Procedure for the Study

Gathering the Data

A two-part study was used to evaluate the Forestry Incentives Program one year after its inception. The first phase involved FIP administration within the study area. Secondly, landowner interviews were used to gain information on the participants and field results.

The study area was based upon the Tennessee Division of Forestry service forester areas of responsibility. State FIP summary sheets revealed considerable variation in the number of FIP applicants per county, although the application rate was always very small. This variation created foresters' areas of both relatively low and high numbers of applications across Tennessee. It was, therefore, decided to choose a low and high area from each of the two East Tennessee forestry districts for evaluation.

Two district foresters, four area foresters, and 12 ASCS county executive directors were interviewed. They provided information about their own and each other's duties, assistance by other agencies, and FIP results.

The second phase consisted of interviews with landowners. Administrative records contained names of 59 applicants in the 12 counties. Most owners were personally interviewed, but out-of-state owners and local owners who could not be personally contacted were mailed a questionnaire complete with cover letter and a self-addressed stamped envelope; a follow-up was sent if no reply was received within three weeks. Fifty interviews were conducted and eight questionnaires

mailed, with five being returned completed (one applicant had died). This resulted in a 93% coverage of the original population of applicants.

Both surveys were primarily descriptively analyzed. The small populations of administrators and applicants, the combining of data received through personal interviews and mailed questionnaires, and the subjectiveness of much of the data obtained minimized statistical analysis accuracy standards. Descriptive analysis accurately described the findings without adding excessive statistical error into the results. Chi-square tests were conducted to determine if relationships existed between owner characteristics and applications or project completions per area.

The Study Area

The study area (Figure 1) included portions of the rugged Unaka Range on the North Carolina border, the Great Valley and its characteristic parallel ridges and valleys, and the Cumberland Plateau. Precipitation, growing season, and temperature are generally favorable to timber production; site quality is variable, ranging from highly fertile mountain coves to dry, rocky ridgetops.

The twelve counties, Anderson, Blount, Cocke, Grainger, Hamblen, Hancock, Hawkins, Jefferson, Monroe, Morgan, Roane, and Sevier, were grouped by area forester responsibility and labeled according to the number of applications in each. For example, L-1 was the study area in District One with the low number of applications (Figure 2). A summary of the study areas follows (15, 25, 65).

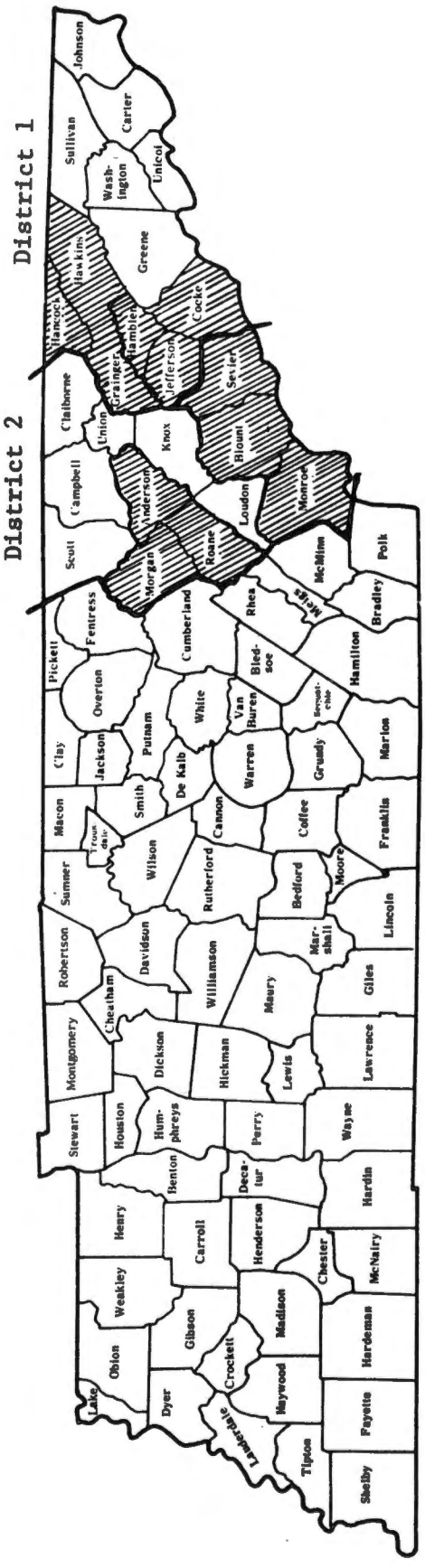


Figure 1. Location of the Study Area

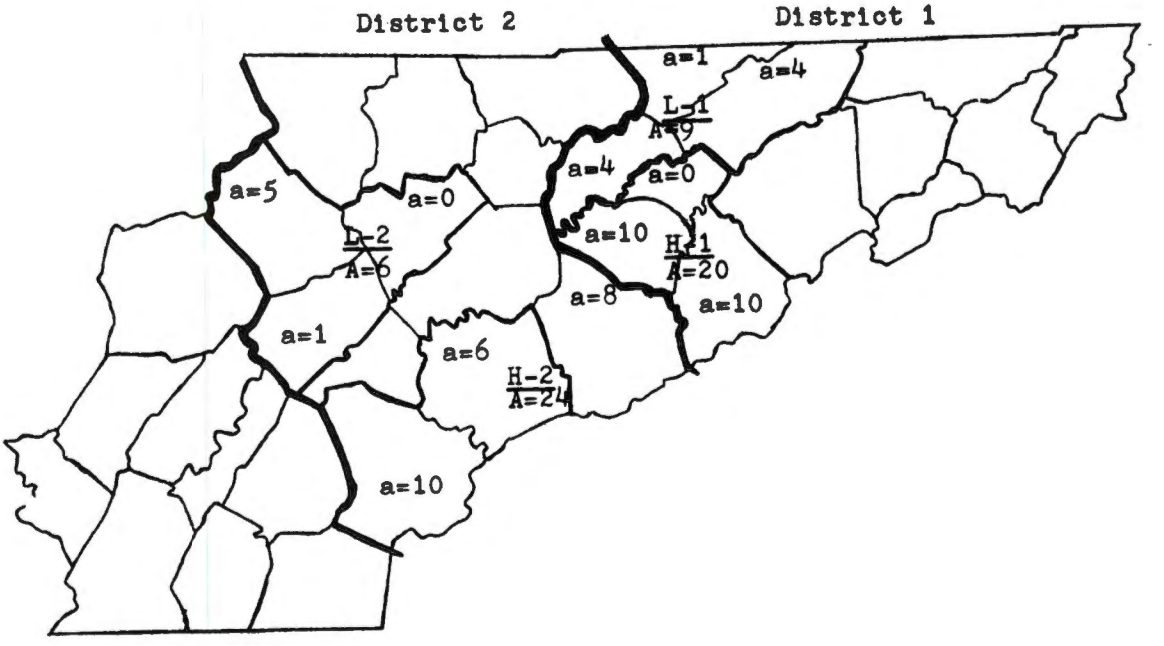


Figure 2. Individual Study Area Data

The underlined letter-number combination (L-1, L-2, H-1, H-2) represents the area designation.

The symbol "a=_" represents the number of applications per county.

The symbol "A=_" represents the number of applications per area.

Source: 1974 FIP Progress Report, dated December, 1974, obtained from the state ASCS Office, Nashville, and information from local administrators.

L-1. This area, composed of Grainger, Hancock, and Hawkins Counties, contains 347,900 acres (94%) in private, non-industrial ownerships. There was a net gain of 1% in commercial forest acreage during the ten-year period 1961-1971. The area contained the two counties with the lowest median family incomes in the study area (Grainger and Hancock, with $5086 and $2683, respectively); and Hawkins County is within the Kingsport-Bristol metropolitan area. There are no mass communications media exclusively for Hancock County.

H-1. In Cocke, Hamblen, and Jefferson Counties, 82% of the 251,700 commercial forest acres (206,600 acres) is in private ownership. The area gained 3% in forest area from 1961-1971. Cocke County borders the Cherokee National Forest. Area H-1 contained the county with the largest forest area loss (Hamblen, 19%) and the two counties with the least forest acreage (Hamblen, Jefferson); H-1 ranked last in total privately-owned forest area. Hamblen County is rated by the U. S. Department of Commerce as a large industrial county.

L-2. This area consists of Anderson, Morgan, and Roane Counties. Of the 563,100 commercial forest acres, 470,000 acres (83%) are privately owned. There was a net loss of 4% of the total forest area from 1961-1971. Morgan County contained a large area of forest industry holdings. This study area had the most privately owned forest acreage of the four areas. It also had a high economic standing, as Anderson and Roane Counties ranked first and third respectively in median family income for the study areas, with $8558 and $7401; Roane County is considered a large industrial county.

H-2. Blount, Monroe, and Sevier Counties had the most total commercial forest area, with 580,600 acres. The area ranked second in privately owned land (405,500 acres, 70% of the total) because of large industrial ownerships in Blount and Monroe Counties and considerable national forest land in Monroe County. The 1961-1971 period showed a 4% gain in forest land. Blount County was second in median family income with $7898 and is considered part of the Knoxville metropolitan area.

C. The Findings

Phase One - Administrators

Personal interviews with 12 ASCS county executive directors, two district foresters, and four area foresters, determined their respective knowledge about FIP, their attitudes about the program, and the application of FIP in their area. Interviewees were encouraged to answer all questions as openly as possible, even the structured questions. The interviewee's attitude toward FIP during the interview was subjectively evaluated by the author. Generally, differences were found between ASCS directors and foresters, but there was minimal difference between area and district foresters. Unless otherwise designated, foresters will be discussed as a single group.

Administrator experience. ASCS county directors had agency experience ranging from 5 to 21 years. All, therefore, could presumably devote full-time to program administration instead of learning administrative procedure. One area forester had less than one year of experience, but experience of others ranged up to 15 years.

FIP understanding. Comprehension of FIP varied considerably. At least three ASCS county directors had a tendency to equate FIP with only planting. All had a general knowledge of program requirements, but five required the office clerk's assistance to discuss details. The two county directors who appeared most knowledgeable of FIP were in the counties with no applicants. All foresters, by contrast, had a good to excellent knowledge of FIP mechanics, but lacked information concerning funding.

Applicant rejections. Discrepancies were found in participation information gathered from foresters and ASCS county directors. Only one director reported application rejections; however, all foresters knew of rejections. Two factors accounted for ASCS directors not acknowledging rejections. Some offices apparently did not consider referrals to the area forester as formal applications. Only forester-approved referrals were "applications," and none of these were rejected by the ASCS county committee. Also, some FIP-ineligible applicants were approved for REAP funding and not mentioned in the interview as being rejected.

Success of FIP. FIP's success in the various areas and counties was another subject of disagreement. Only one county director considered the program successful; he said it served the needs of the landowners with completed projects. Three foresters said the program was a limited success, hampered mainly by its first year and late start. Several primary reasons were given for the program's failure (Table 1). Other reasons mentioned include expensive land, poor administration, part-time farmers, and lack of program promotion.

TABLE 1

Administrators' Reasons for the Failure of the 1974 Forestry Incentives Program in East Tennessee

Reasons	Respondents	
	Number	Percentage*
Lack of seedlings	6	43
Labor/vendor shortage	5	36
Minimum acreage too high (planting)	4	29
Cost-share rate too low	3	21
Forester workload too heavy	2	14
Eligibility requirements too strict	2	14
Late program start	2	14

*Most respondents gave more than one answer; therefore, the total percentage is greater than 100%.

Although most administrators indicated FIP failed, there was no common definition of success. Thirty-nine percent felt completion rate was an adequate measure of success, 28% believed it was the number of participants, 17% considered approved acreage a means of evaluation, and 11% decided upon the amount of money spent. Foresters, more so than ASCS directors, stated that approaching the FIP goal of maximizing private land timber production was a good definition of success. County directors favored measuring success by participation.

Factors affecting participation. FIP administrators, when asked why they believed owners participated in or rejected the program, responded with a variety of answers, illustrated in Tables 2 and 3. Economics were the bases for both major reasons. Participation was due to a desire to improve the land with minimum investment; non-participation was because inexpensive labor was not available.

Fifty percent of the ASCS directors and 83% of the foresters said FIP applicants differed from non-participants. The differences most cited were higher education and income among the participants. Other differences were new owner, "hobby farmer," business or professional occupation, and absentee owner.

FIP publicity. FIP publicity took three forms - mailings, mass media, and personal contact. The ASCS used each type of publicity, but only one county had a special Forestry Incentives Program promotion. FIP was usually mentioned as part of routine program listings in ASCS newspaper columns and monthly newsletters. The one exception was Monroe County (area H-2), where the director spoke to the local forest-owners association and made special mailings to all owners of

TABLE 2

Administrators' Reasons for Landowners Participation in the 1974 Forestry Incentives Program in East Tennessee

Reasons	Respondents	
	Number	Percentage
Improve land with minimum personal investment	11	61
Interested in forestry	6	33
Need for the practice	3	17
Progressive owner	2	11
Investment	2	11
Improve aesthetics and for future	2	11
Owner signs-up for any program	2	11

*Most respondents gave more than one answer; therefore, the total percentage is greater than 100%.

TABLE 3

Administrators' Reasons for Lack of Landowner Participation in the 1974 Forestry Incentives Program in East Tennessee

Reasons	Respondents	
	Number	Percentage
No available labor	7	44
Did not understand program	6	33
Long investment period	6	33
Other farm objectives	6	33
Lack of forestry interest	5	28
10-acre minimum (planting) too large	3	17
General economic situation of the nation	3	17
Part-time farmer	2	11
Lack of time	2	11
Expensive land	2	11

*Most respondents gave more than one answer; therefore, the total percentage is greater than 100%.

100 or more acres. Foresters emphasized mass media methods, usually newspaper articles; but 50% also used mailings to prospective participants. Two foresters mentioned extra personal contacts for FIP recruitment.

All the foresters and seven ASCS county directors were aware of each other's publicity, but they apparently had little knowledge of extension service FIP publicity. Only one area forester and four ASCS offices (28% of the administrators) were familiar with any efforts by county extension agents. This suggests that extension service publicity, if done at all, was primarily by personal contact; ASCS directors and foresters would be familiar with organized mass media efforts. Four administrators knew of FIP publicity by the Soil Conservation Service. Two of the five ASCS directors unfamiliar with forester publicity were in H-2 and two in L-2; the other was in L-1.

Program administration. The facets of program administration were subjects of many conflicting statements by administrators. Application priority was one such topic. Larger tracts presently receive priority over smaller ones, all other factors being equal, according to the belief that larger acreages can contribute more to the national timber supply. The administrators were asked if they agree with this rating system; the results are given below.

Priority Preference	Percent of Total	Percent of Foresters	Percent of ASCS
Large tract	22	33	17
Small tract	56	33	67
All equal	22	33	17

Most administrators said small owners should be favored because they comprise the majority of the owners, more social benefits would result, they have a greater need, and larger owners should be more willing to invest. Twenty-two percent agreed with present priority allocations, but an equal percentage stated that all owners should have an equal opportunity.

Ninety-two percent of the ASCS county executive directors, but only 33% of the foresters, felt their actual role in FIP administration approximated their legislated duties. They said this resulted in acceptable administrative procedure. One director said his duties were similar to those legislated, but that this was a program weakness. He stated the ASCS could not effectively screen applicants, resulting in wasted time and efforts. Another director said there was much cross-over between agencies in their duties and that the program was unclear. This thought was shared by four foresters. Two said they were required to do more publicity and landowner motivation than legislated. The other two felt the program was amended too often ("at least weekly"), causing poor understanding, creating extra work, and wasting considerable time.

One hundred percent of the administrators said the agencies generally had close, cooperative relationships, but only 56% believed the other two primary agencies performed their duties well. Eight county directors and two area foresters said all agencies concerned performed acceptably. Most criticism of area foresters was not of the foresters' performance, per se, but was based in the belief that three counties is too much work for one man to efficiently administer.

One forester was criticized for lack of incentive in a particular county in L-2 because of a traditionally low support of forestry programs. The ASCS was strongly criticized by the remaining four foresters. Poor FIP understanding was the major complaint. Other criticisms were little publicity and recruitment efforts, too farm oriented, interagency jealousy, and dislike of FIP and REAP competition. The extension service was criticized by personnel of both agencies.

Both agencies suggested ways to improve the Forestry Incentives Program. The most common ideas are given in Table 4. Other suggestions included finalize program design (reduce number of amendments), more eligibility and practice flexibility, and better availability of seedlings.

Summary. Many varying opinions exist concerning FIP, its administration, and suggestions for improvements. The following paragraphs summarize these topics according to study area division.

L-1. All five administrators in this area (two area foresters due to mid-year transfer) were somewhat knowledgeable about FIP, but their desire for its success varied. The foresters and one county director were apparently enthusiastic and supportive; but two directors seemed partially or totally disinterested in forestry. All said the program failed, but the ASCS directors had little criticism or suggestions for improving FIP.

Program communication was primarily by mass media and mailings. In only one instance, letters by the original forester to prospective applicants, was there a special FIP publicity effort. FIP was

TABLE 4

Suggestions for Improving FIP by Administrators of the 1974 Forestry Incentives Program in East Tennessee

Suggestions	Responses* Total Number	Total Percentage	ASCS Number	ASCS Percentage	Foresters Number	Foresters Percentage
Better pre-application screening	6	33	1	8	5	83
Vendor availability	6	33	2	17	4	67
Start FIP earlier in year	6	33	3	25	3	50
Simplify or remove management plan requirement	5	27	3	25	2	33
Reduce ten-acre planting minimum	5	27	3	25	2	33
Reduce forester workload	4	22	3	25	1	17
Improve communications	4	22	3	25	1	17

*Most respondents gave more than one suggestion; therefore, the total percentage is greater than 100%.

mentioned at personal contacts as part of routine, not specially directed, procedure. One county extension agent and the Soil Conservation Service were known to have originated some publicity. One ASCS county director was unfamiliar with forester-originated information.

H-1. In contrast to L-1, two administrators (the area forester and one county director) said FIP succeeded. The director believed it served the purposes of the people involved. The forester felt, because his area had good results relative to other areas, FIP was partially successful. He claimed much of the credit himself because of spending considerable time in program initiation.

Only one ASCS county director was knowledgeable in the program, and this was in a county with no applicants; he was also very supportive of FIP. Neither of the other two directors had a strong understanding of FIP. One was enthusiastic toward forestry, the other disinterested.

There was a generally good working relationship between agencies, but the forester criticized the ASCS for being too farm oriented and not working for FIP success.

Only the forester and one county director offered many suggestions for improving FIP. The director was highly critical of the national ASCS administration; he said that it was the cause of many FIP problems. The improvement suggestions primarily involved better communications and elimination of administrative red tape.

Communication of FIP information was similar to L-1, with one major exception - neither the ASCS or the forester knew of publicity

efforts by other agencies. The forester also spent much extra time disseminating information to landowners.

L-2. Administrators in this area all seemed knowledgeable in FIP guidelines (two county directors exceptionally so). All said the program failed for such reasons as lack of planting stock, county agricultural patterns, late start, and lack of promotion. Only one director was enthusiastic about FIP. The forester supported FIP and recognized its need, but he had many complaints.

ASCS county directors said they performed their role as legislated. The forester stated he did less than he should have, due to much paperwork required relative to the field work, and hurt the program's results. All said there were generally good working relationships between agencies, with some exceptions. The forester indicated the ASCS lacked FIP understanding and that both the ASCS and extension service failed in publicity efforts. One county director said the forester was overworked and could not adequately meet his responsibilities. Another said neither the forester nor the county agent performed well in her county.

Everyone suggested ways to improve FIP. The forester, however, made one principal comment. The duplication and conflicts between federal incentives programs should be eliminated by developing one program to cover all forestry needs.

Communication efforts in L-2 were below the other areas, but both the extension agent and Soil Conservation Service in one county were known to have done some publicizing. Standard ASCS mailings

and mass media articles, with no special FIP emphasis, were the rule. The forester did some media publicity, but two ASCS directors did not know of his efforts. No one mentioned personal contacts as an important communications means.

H-2. The Forestry Incentives Program, in the stated opinion of the ASCS county directors in this area, failed. The forester said it was as successful as possible considering the late start and it being a first year program. Two directors supported FIP, but the third said forestry in East Tennessee is a project only for the wealthy. Everyone but one director said there was an excellent working relationship between agencies and all performed their duties well. The one disagreeing said the forester was too overworked to adequately meet his responsibility and that the county extension agent contributed little. Each administrator suggested program improvements.

Communications were possibly the major reason for this area having a high number of applications. The usual ASCS general mailings and articles were distributed. The forester sent letters to prospective applicants. The extension agent and Soil Conservation Service in two counties were also known to have promoted the program. Finally, the director of Monroe County made special FIP mailings and speaking engagements. However, two county directors did not know of forester publicity.

In summary, the ASCS was generally satisfied with FIP's administrative organization in 1974, while the foresters were highly critical. Most foresters' complaints centered around poor program understanding, support, and publicity by "cooperating" agencies. There

appeared to be little inter-area difference in the ASCS personnel, with both positive and negative FIP support in each area. The overall support, however, was slightly stronger in H-1 and H-2. There was a difference in area forester performance; attitudes and performance of the two district foresters seemed similar. The foresters in the high-participation areas worked harder at promotional efforts.

Communications efforts were most certainly a reason for variation between areas. The two high-participation areas had a much more intensive campaign by all agencies to distribute FIP information. The desire for success and interest in forestry by the administrators, being higher in H-1 and H-2, apparently provided the motivation to expend more individual effort in promoting FIP. Inter-agency communication, however, was often weak, despite all administrators saying the agencies had close working relationships. Both low-participation areas had ASCS directors unfamiliar with forester-originated publicity; and H-2 also had two of its directors unaware of the forester's efforts, although he spent extra time in FIP publicity work.

Phase Two - Landowners

The second phase of the study, interviews with FIP participants, was necessary to fully evaluate the 1974 Forestry Incentives Program. These interviews provided the best available sources of participation information and personal data for categorizing applicants. Only the applicants could provide detailed information about their project results and reasons their projects failed or succeeded. They also gave some insight into problems with FIP and its administraton which

adversely affected landowners.

The participants varied greatly in personal characteristics and outlook toward the program. Meaningful variation between the study areas will be noted in the discussion.

Personal characteristics. The typical FIP applicant appeared to be middle-aged, a resident owner, well-educated, earned a good income, and was in the business and professional occupation group. The applicant's residence and the proportion of his tract in forest, however, were the only characteristics which were statistically significant when related to high- and low-participation areas.

Age. Half the applicants were between 41 and 65 years of age, and the others generally divided between younger and older groups (Table 5). However, L-1 had no elderly applicants, and those in H-2 had evenly distributed ages. Applicants in low-participation areas were younger than those in the respective high-participation area.

Residence. Over half the applicants (57%) resided on their land (Table 6). Most of the rest lived only a few miles away, but some were over 2000 miles from the tract. The low-participation areas had a majority of non-resident applicants. This characteristic showed statistical significance due to the high percentage of resident owners in the high-participation areas and the numerous absentee owners in the low-participation areas.

Education. The applicants averaged two years of college (Appendix A, Table 23). Schooling varied from several doctor of philosophy and medical degrees to one individual with no formal

TABLE 5

Age of 1974 FIP Applicants in East Tennessee

	Breakdown by Study Area				
Age	Total No/%	L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
40 and younger	14 27	2 25	5 29	1 17	6 29
41 - 65	26 50	6 75	9 53	4 66	7 33
Over 65	12 23	0 -	3 18	1 17	8 38
Average age	53	48	51	53	56

TABLE 6

Percentage of Resident and Absentee Owner Applicants for the 1974 Forestry Incentives Program in East Tennessee

	Breakdown by Study Area				
	Total No/%	L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Resident Owners	31 57	2 25	13 76	2 33	14 61
Absentee Owners	23 43	6 75	4 24	4 67	9 39

education at all. Areas L-1 and L-2 had higher average educational levels than H-1 or H-2.

Income. The greatest number of applicants belonged to the high-income group (Table 7). Generally, applications increased as income increased. This relationship, however, varied among study areas. The percentage of applicants in the income categories decreased in H-1 as income increased. Area L-2 had equal numbers of applicants at both extremes.

Occupation. Forty percent of the applicants were employed in business or professional occupations (Appendix A, Table 24). Area H-1 had more farmers and retirees. Applicants in the low-participation areas were more likely to have a business or professional occupation than those in H-1 or H-2.

Tract size. FIP applicants owned more land than the average Tennessee farm owner, 141.5 acres (Table 8), compared to statewide average of 124 acres (15). Tracts in high-participation areas averaged larger than in low-participation areas. More holdings, except in H-1, were 75% or more forested (Table 9). Low-participation areas had a statistically significant higher proportion of forested land per ownership than the high-participation areas.

Income from the land. Few owners depended upon their land as a major source of income (Appendix A, Table 25). Seventy-three percent received less than 10% of their total family income from the land; and only 10% depended upon the land for more than half their income. A larger percentage of owners in the high-participation areas than in

TABLE 7

Income of 1974 FIP Applicants in East Tennessee

Income Range	Total No/%	Breakdown by Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Less than $5,000	10 19	0 -	5 29	2 33	3 14
$5000 - $9999	7 13	1 12	4 23	1 17	1 5
$10,000 - $14,999	11 21	1 12	2 12	1 17	7 33
$15,000 - $24,999	8 15	4 50	3 18	0 -	1 5
$25,000 or more	16 31	2 25	3 18	2 33	9 43

TABLE 8

Tract Size of 1974 FIP Applicants in East Tennessee

Acres	Total No/%	Breakdown in Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
50 or less	14 26	2 25	7 41	0 -	5 22
51 - 150	22 41	5 62	5 29	3 50	9 39
151 - 250	12 22	1 13	3 18	1 17	7 30
Over 250	6 11	0 -	2 12	2 33	2 9
Average acreage	141.5	86	126	202	211

TABLE 9

Forested Proportion of Total Acreage of 1974 FIP Applicants in East Tennessee

Percent Forested	Total No/%	Breakdown in Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
0 - 20	10 18	1 12	5 29	0 -	4 17
21 - 50	14 26	2 25	5 29	1 17	6 26
51 - 75	11 20	2 25	5 29	0 -	4 17
Over 75	19 35	3 38	2 12	5 83	9 39

the low-participation areas earned 25% or more of their income from the land. Twenty-four percent of the applicants in H-1 earned more than half their income from the land.

Characteristics of approved applicants. There were no major differences between approved applicants and the total applicant group. Approved applicants had a slightly lower income than the overall average. Also, neither of the two housewife-applicants were approved.

Project results of FIP applicants. There was no preference for either tree planting or stand improvement by the applicants and few projects met with success.

Desired projects. Tree planting and stand improvement were equally sought, but average proposed project size was 100% larger for stand improvement than planting (Tables 10 and 11). Area L-1 favored planting by a two-to-one majority. Proposed improvement projects in H-1 and L-2 averaged smaller than planting projects. Additionally, the desired average planting project in H-2 was below the ten-acre minimum. The average size planting project in L-1 and L-2 was larger than in the high-participation areas.

Application approval. Projects were approved by nearly three-to-one (Appendix A, Table 26). Area L-2 had no rejections, and H-2 had the lowest approval rate for both practices. The high rejection rate for planting in H-2 was due to the small project size.

Reasons for rejected applications fell into three major categories: (1) insufficient acreage to qualify for planting; (2) the forester could not contact the owner; and (3) the desired practice was found

TABLE 10

Percentage of Applicants Applying for Each Practice of the 1974 Forestry Incentives Program in East Tennessee

	Applications by Study Area				
Desired Practice	Total No/%	L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Planting	24 46	4 50	7 41	3 50	10 48
Stand improvement	24 46	2 25	10 59	3 50	9 43
Both practices	4 8	2 25	0 -	0 -	2 9

TABLE 11

Size of Desired FIP Practices for the 1974 Forestry Incentives Program in East Tennessee

	Breakdown by Study Area				
Project Size	Total No/%	L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Planting					
Less than 10 acres	6 24	1 17	0 -	0 -	5 56
10 acres	11 44	3 50	5 71	2 67	1 11
More than 10 acres	8 32	2 33	2 29	1 33	3 33
Average project size	Acres				
Planting	11.9	14.6	11.4	13.3	9.8
Stand improvement	24.9	20.3	9.8	11.7	43.2

not actually needed. Rejections in the third category occurred when the forester found the area with sufficient natural regeneration, the owner's goals were not timber production, and the project results would not justify the expense.

Project completions. Only slightly more than one-fourth of the approved projects were completed (Table 12). Planting projects had a lower completion rate than stand improvement projects. High-participation areas had greater overall completion rates than low-participation areas. L-1 had no completions for either practice. Seventy-one percent of the non-completed projects were not even started.

Applicants gave a variety of reasons for not completing their projects (Table 13). The most common problems were labor or equipment difficulties (43%) and limited time available to work on the project (29%). Landowners often stated that labor, if available, was too expensive to hire with existing cost-sharing rates. Other reasons for not completing projects - illness, selling the land - were not caused by either the program or administrators; however, these accounted for 20% of the total.

Completed projects and landowner characteristics. Younger owners comprised the largest fraction of total completions and had the highest completion rate for an age group (Table 14). Owners between 40 and 65 years old, the largest applicant group, had the poorest completion record. This was the only characteristic that showed statistical significance with project completions, primarily due to the greater percentage of completions by the younger age group.

TABLE 12

Completion of Approved Projects for the 1974 Forestry Incentives Program in East Tennessee

Project	Total No/%	Completions by Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Tree planting	4 24	0 0	3 50	0 0	1 33
Stand improvement	7 30	0 0	4 44	1 33	2 29
Total completions	11 28	0 0	7 47	1 17	3 30

TABLE 13

Applicants' Reasons for Not Completing Their 1974 FIP Projects in East Tennessee

Reasons	Total No/%	Reasons by Study Area* L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Labor/equipment difficulties	12 43	5 62	0 -	3 60	4 57
No time for work	8 29	1 12	3 38	2 40	2 29
Could not get seedlings	4 14	1 12	1 12	1 20	1 14
Illness	3 11	1 12	2 25	0 -	0 -
Poor performance by administrators	3 11	0 -	2 25	0 -	1 14
Sold land	2 7	0 -	1 12	0 -	1 14
Cost-share too low	2 7	0 -	0 -	1 20	1 14
Procedure too complicated	1 4	1 12	0 -	0 -	0 -
Wanted commercial thinning	1 4	0 -	1 12	0 -	0 -

*Total percentages may be greater than 100% because some landowners gave more than one reason.

TABLE 14

Completions of 1974 FIP Projects in East Tennessee, Relating Applicant's Age to Completion

Age Group	Proportion of Total Completions No/%	Completion Rate by Age-Group and Practice		
		Planting No/%	Improvement No/%	Total Group Completions No/%
40 and younger	5 45	2 50	3 60	5 56
41 - 65	2 18	1 8	1 11	2 10
65 and older	4 36	1 50	3 38	4 40

Resident owners accounted for nearly three-fourths of the completions (Appendix A, Table 27), but numbered only slightly more than half the approved applicants. The overall completion rate for resident owners, although only 24%, was 100% greater than for absentee owners.

The difference in completion rates between educational-level groups was generally slight (Appendix A, Table 28). The difference between the educational level of the owners completing their projects and the total applicant group was also minimal.

Owners with higher incomes (over $15,000) had 54% of the total completions (Appendix A, Table 29), compared to 46% of the approvals. The lowest income category had the worst completion rate. Excluding this category, there was relatively little difference between completion rates for the various income groupings.

Most owners with completed projects were in business or professional occupations (Appendix A, Table 30). Farmers, the smallest occupational group of approved applicants, ranked second in percentage of total completions. Farmers also had the highest occupational-group completion rate.

Completions on tracts of 50 acres or less made up 55% of the total number of completions (Table 15), although they accounted for only 27% of the approved applications. This size-class completion rate (40%) was more than double the next highest completion rate.

In summary, the owner appearing to have the greatest chance of completing his project differed from the typical applicant by being

TABLE 15

Completions of 1974 FIP Projects in East Tennessee, Relating Applicant's Tract Size to Completion

Tract Size	Proportion of Total Completions No/%	Completion Rate by Practice and Tract Size-Class: Planting No/%	Improvement No/%	Total Size-Class Completions No/%
50 acres or less	6 55	2 33	4 44	6 40
51 - 150 acres	2 18	1 8	1 11	2 9
151 - 250 acres	2 18	1 17	1 14	2 15
Over 250 acres	1 9	0 -	1 25	1 17

younger and owning less land; however, only the age of the owners who completed their projects was significantly related to completion rates.

FIP administration. Efficient administration is especially important with new programs. Poor administration leads to dissatisfied applicants and limits success, jeopardizing future participation and program continuation. There were many aspects of FIP administration to study, but dissemination of program information was perhaps the most important aspect in the first year. Without this to recruit participants, there would be little to administer.

FIP publicity. The ASCS was the most common source of unsolicited FIP information for the applicants (Table 16). Fifty-four percent learned about FIP from the ASCS, usually through the monthly newsletter. Foresters made the initial contact for 8%. The only applicant who received information from the extension service was, in fact, the county extension agent for his county. Twelve percent of the owners learned about FIP through the mass media, usually newspaper articles. Fifteen percent were not contacted by any agency but initiated a search for forestry assistance themselves. More applicants in H-1 and H-2 received initial FIP contact from the ASCS than in the corresponding low-participation area. Area L-1 had a high proportion of its owners (38%) seek information themselves.

The ASCS was also the most beneficial information source, but only slightly more than the foresters (Appendix A, Table 31). Information obtained from other sources was limited. Owners in H-1 felt the forester was the most beneficial information source.

TABLE 16

Initial Sources of FIP Information for 1974 FIP Applicants in East Tennessee

Source	Total No/%	Sources by Study Area* L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
ASCS	28 54	3 38	8 47	3 50	14 67
Forester	4 8	1 12	3 18	0 -	0 -
Extension agent	1 2	0 -	0 -	1 17	0 -
Mass media	6 12	1 12	2 12	2 33	1 5
Other	6 12	0 -	3 18	1 17	2 10
Owner initiated search for forestry assistance	8 15	3 38	2 12	0 -	3 14
Owner did not remember	2 4	0 -	1 6	0 -	1 5

*Percentage may total more than 100% because some owners gave more than one reason.

Information about FIP was apparently disseminated in an understandable format, as 75% of the applicants said they were knowledgeable about the program when they applied (Table 17). The area with the highest rejection rate, H-2, had the lowest level of understanding. More owners in the low-participation areas said they understood FIP when they applied than in the high-participation areas; however, the high understanding rate in L-2 could have been aided by three of the six applicants being in forestry-related professions.

The information often reached its intended audience. Forty percent of the applicants said they would not have considered forest practices without cost-sharing (Table 18). Nearly an equal percentage (38%) indicated they would have carried out the practice without funding. Fifty-three percent of the applicants in H-2 stated they would have carried out their practice without FIP.

Landowner satisfaction with administration. A slight majority of the applicants (52%) were totally satisfied with general FIP administration, but there were several complaints (Table 19). The most common, due to its prominence in H-2, was that it was difficult to arrange appointments with the forester; H-2's forester administered five counties due to a personnel shortage. Limited planting stock was the next most important complaint, especially in L-2. Applicants in H-1 had the fewest complaints with program administration.

Re-application. Eighty-two percent of the applicants said they would definitely or possibly apply again for FIP assistance. Of the remaining nine landowners, only two would not apply because of the

TABLE 17

The Level of FIP Understanding at the Time of Application of 1974 FIP Applicants in East Tennessee

Level of Understanding	Total No/%	Responses by Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Very good	38 75	7 88	13 76	6 100	12 60
Some	5 10	0 -	2 12	0 -	3 15
Poor	8 15	1 12	2 12	0 -	5 25

TABLE 18

The Attitude Toward the Project Without Cost-sharing of 1974 FIP Applicants in East Tennessee

Attitude	Total No/%	Responses by Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Would have carried out project without funding	19 38	3 38	4 24	2 33	10 53
Would have considered project	11 22	1 12	4 24	1 17	5 26
Would not have considered project	20 40	4 50	9 52	3 50	4 21

TABLE 19

Complaints About FIP Administration by 1974 FIP Applicants in East Tennessee

Complaint	Total No/%	Responses by Study Area* L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Difficult to arrange appointment with forester	7 16	1 14	0 -	0 -	6 38
No seedlings	6 14	1 14	2 13	2 33	1 6
Restrictions too limiting	5 11	1 14	2 13	1 17	1 6
Poor communication	4 9	0 -	1 7	0 -	3 19
No assistance in obtaining labor	3 7	1 14	0 -	1 17	1 6
Excessive "red tape"	2 5	1 14	1 7	0 -	0 -
Slow to pay assistance	2 5	0 -	0 -	1 17	1 6
No complaints with FIP administration	23 52	3 43	10 67	3 50	7 44

*The percentages may total more than 100% because some owners had more than one complaint.

program. One needed labor and the other was against all government assistance programs. Other reasons given were personal.

Labor assistance and greater cost-sharing were two major administratively correctible factors given by landowners as a means to induce re-application. Other inducements are given in Appendix A, Table 32.

Landowner management attidudes. Most landowners had poor past forest management histories but desired to improve their woodlands in the future. Their reasons for owning the land could be keys to incentives program emphasis.

Previous management. Sixty-five percent of the applicants had never used professional forestry services before the FIP requirement (Appendix A, Table 33). In L-2, however, 67% routinely used forestry services.

Major reasons for a low intensity of woodland management in the past were owner time limitations and tenure (Table 20). Thirty-one percent of the owners said they did not have time to devote to forestry. Twenty-nine percent were new owners (five years or less). Only 6% of the applicants gave labor difficulties as a reason for poor management. Reasons for poor management were so varied that none appeared much more important in any area, except perhaps owners with time limitations in H-2 and new owners in H-1.

Future plans. Sixty-seven percent of the applicants desired to manage their land for timber in the future (Table 21). Sixty percent of the owners in H-2 had no plans for their woodland. All owners in

TABLE 20

Reasons for Low Intensity of Woodland Management by 1974 FIP Applicants in East Tennessee

Reasons	Total No/%	Responses by Study Area* L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Personal time limitations	16 31	2 25	3 18	1 17	10 48
New owner (five years or less)	15 29	2 25	7 41	2 33	4 19
Low profit in forestry	8 15	2 25	2 12	1 17	3 14
Financially unable	7 13	2 25	1 6	1 17	3 14
Lack of forestry skills/ knowledge	4 8	1 12	1 6	0 -	2 10
Forestry conflicts with aesthetics/recreation	4 8	1 12	2 12	0 -	1 5
Small acreage	3 6	1 12	0 -	0 -	2 10
Poor condition of woodland	3 6	1 12	0 -	1 17	1 5
Forestry not consistent with other objectives	3 6	0 -	0 -	1 17	2 10
No labor	3 6	1 12	0 -	0 -	2 10
Holding timber for emergency	3 6	0 -	0 -	1 17	2 10
No interest in or need for forestry practices	3 6	0 -	3 18	0 -	0 -
Inaccessibility	3 6	1 12	1 6	0 -	1 5
Return on investment too slow	2 4	2 25	0 -	0 -	0 -
Physically unable	1 2	1 12	0 -	0 -	0 -
Better land use	1 2	0 -	1 6	0 -	0 -
Dislike government programs	1 2	1 12	0 -	0 -	0 -
Owner feels he has managed his land as intensively as he could	4 8	0 -	2 12	1 17	1 5

*Percentages are greater than 100% because most owners gave more than one reason.

TABLE 21

Future Plans for Their Woodlands by 1974 FIP Applicants in East Tennessee

Plans	Total No/%	Responses by Study Area* L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Manage for timber	34 67	8 100	12 71	6 100	8 40
Clear for crop/ pasture	4 8	0 -	2 12	1 17	1 5
Leave as is/ no plans	16 31	0 -	4 24	0 -	12 60
Subdivide	1 2	0 -	1 6	0 -	0 -

*The total percentage may be greater than 100% because of some landowners' desire to clear land suitable for crops or pasture and manage the remainder for timber.

the low-participation areas planned to manage at least part of their tract for timber.

Reasons for owning land. Applicants' primary reasons for owning land were homesites and investment (Table 22). Sixty-two percent held their land as a homesite and 38% for investment. Income, with 23%, was not a major reason for most owners. The low-participation areas had more applicants owning the tract for investment; and the high-participation areas, with more resident applicants, had more tracts for homesites.

TABLE 22

Reasons Given by 1974 FIP Applicants for Owning Their Land in East Tennessee

Reasons	Total No/%	Responses by Study Area* L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Home	32 62	3 38	13 76	2 33	14 67
Investment	20 38	4 50	3 18	5 83	8 38
Annual Income	12 23	1 12	6 35	2 33	3 14
Recreation	8 15	4 50	0 -	0 -	4 19
Personal satisfaction derived from owning land	6 12	1 12	1 6	2 33	2 10
Inheritance	5 10	0 -	2 12	0 -	3 14

*Total percentages exceed 100% because most owners gave more than one reason.

IV. DISCUSSION

A. FIP's Contribution to Forestry

Tree planting project completions accounted for only 29% of the total 225 acres approved for those projects; just 61 acres (14%) of the total 446 acres approved for stand improvement were completed. Many owners did not consider the program, since the maximum county application rate was about 0.7%. This was much lower than the 3.9% Muench (45) found for three established forestry assistance programs (Soil Conservation Districts, Agricultural Conservation Program, and Cooperative Forest Management Program); it may in part be explained by time lags between program initiation and maximum participation described by Lionberger (30) and Boardman (7) in their respective works.

Two counties in the study area exceeded their initial funding allocation of $2500 by January 1, 1975, but most counties used much less. Tennessee, by January 10, had spent only 31% of the total initial funding. Comparatively, there was an 18% greater than expected demand for FIP assistance in the South as a whole; one state exactly used its allocation, six states needed an average 54% more, and six states fell short by a 31% average (23). This prompted the federal government to redistribute $300,000 of Tennessee's 1975 funding of $568,400. Likewise, the minimum county allocation was reduced from $2500 in 1974 to $1000 in 1975.

B. Problems with the Legislated Program

No state-coordinated labor source, the ten-acre tree planting minimum, low cost-sharing rates, and no applicant screening procedures were the primary shortcomings with FIP in 1974 that contributed to its low success rate. Tennessee made no provisions for labor assistance, and labor sources from forest industries are limited in East Tennessee. Other states credited much of their incentive program success to state and industrial work crews (61, 73). This was the most important individual factor contributing to the low project completion rate.

A smaller minimum planting acreage would probably have increased participation since many owners did not have ten acres available to plant; Mendel (41) found the average stand established in southeastern Ohio with the Agricultural Conservation Program consisted of five acres. Smaller stands, however, may not be considered economically practical for timber production (34). Exceptions to the ten-acre minimum were added in 1975 (63). Plantations for black walnut could be only two acres. Also, a block of less than ten acres could be planted if it formed one "management unit" with a larger block.

Applicants often needed to contribute considerably more than their legislated 25% due to high project cost above Tennessee's maximum payments. Several owners were unwilling or unable to pay their share. FIP did not have sufficient economic data to guide establishment of cost-sharing maximums. Many problems encountered by low-income owners were not solved by FIP assistance. Similar difficulties were found by Muench (45) and Manthy (34) in separate studies of the Agricultural

Conservation Program. This problem was possibly relieved somewhat in 1975. Maximum payments for planting where complete clearing for site preparation was required was increased to $70 per acre, still often less than 75%; payments for other practices, however, remained less than $30 per acre.

The absence of an effective ASCS applicant screening procedure caused many ineligible applicants to be enrolled in the program. This greatly increased the foresters' workload. Forester efficiency, a factor identified by Manthy (34) as vital to success, was then reduced and FIP results decreased.

The late program start, numerous amendments, seedling shortages, and no educational program for landowners also contributed to FIP's low success. The late spring start of FIP missed the planting season and allowed both administrators and landowners to become involved in busy summer schedules, reducing their time available for project promotion and participation. The numerous amendments curbed many administrators' enthusiasm for FIP and often made understanding difficult, hampering administrative efficiency and program promotion. A shortage of planting stock and no provisions in FIP to increase the supply prevented completion of several planting projects. Benson and Skok (6) found similar problems with the Soil Bank Program. Educational programs for teaching landowners basic forestry principles, programs that could increase the probability of FIP's success, were not included in the legislation. A study by Worley (78) in eastern Kentucky concluded educational programs were necessary to make owners aware of the potential income through forestry.

C. Problems with Program Administrators

Disinterest in forestry on the part of the ASCS and USDA Extension Service appeared to be a primary reason for FIP's lack of participation in East Tennessee. ASCS county executive directors usually gave agriculturally-directed programs, which provided an earlier cash return, higher priority than they gave FIP. FIP was not actively promoted nor were applicants recruited by the ASCS. Similarly, the Extension Service did practically no visible FIP promotion in the study area. Muench (45) found extension activity was directly related to participation in assistance programs.

Low FIP comprehension by all administrative agencies, caused by the program's newness and the many amendments, reduced the effectiveness of the program. ASCS directors and foresters could not promote or administer what they did not understand.

Some foresters lost enthusiasm for FIP and did not strongly promote it because of their heavy workload. They also did not have time to process applications. Benson and Skok (6) discovered a similar problem with the Soil Bank Program. The increased responsibilities created by the Soil Bank caused foresters to inadequately perform their regular duties, such as timber marking and prescribing management plans.

D. Problems with Landowners

Landowner Characteristics

Characteristics of owners who completed the FIP projects did not correspond to generalized results of previous researchers. Financial

status and tract size were the characteristics that had been most consistently related to land management (70). In this study, however, only the owner's age was statistically related to project completion; residence and the proportion of the total tract in forest had statistically significant relationships with application numbers. The significance of age to project completion could, in part, be expected because of the physical labor involved in many forestry practices, a fact favoring younger applicants. Anderson (2), Brown (8), and LeVasseur (29) also found younger owners to be better land managers, but Babeu, et al., (4) concluded older owners excelled. The tract-size limitation of FIP could be one explanation as to why that was not a significant characteristic; previous studies often had no acreage limitation or abided by the U.S. Forest Service definition of 5000 acres as a "small tract."

Factors Affecting Completions

Financial considerations, available time to work on projects, and numerous absentee-owner applicants were the most important landowner problems affecting FIP in 1974. Owners often did not have disposable capital to invest directly into their projects or to hire labor. Many chose investment opportunities which provided faster returns or higher interest rates; LeVasseur (29), Main and Bradford (33), and Worley (78) came to similar conclusions in their respective studies.

Applicants seldom had sufficient time to work on their FIP projects. Time-consuming non-farm occupations prevented many from completing the practice. Farmers often devoted all their time to "money" crops and

general farm upkeep. This problem was compounded by the absence of state labor-support.

Absentee owners, nearly half the applicants, faced the same problems as resident owners plus the difficulties arising due to physical separation from their land. The very low completion rate of absentee owners serves as evidence that their problems were multiplied.

E. Factors Which Caused Inter-Area Participation Differences

Inter-area FIP participation differences were caused by the combined effect of the area forester and ASCS offices in motivating landowners. The administrator survey gave the preliminary conclusion that, as Manthy (34) found, the forester was the most important success factor. The landowner survey, however, repudiated this; too few applicants were initially contacted by the foresters. The ASCS in all areas gave little support, but appeared more supportive in the high-participation areas.

The influence of governmental agencies other than the ASCS and Division of Forestry was generally small. These agencies were ruled out as a reason for high- and low-participation areas.

The proximity of both high-participation areas to the Cherokee National Forest was possibly beneficial to those areas. Owners in H-1 and H-2 may have had greater forestry knowledge than owners in L-1 or L-2, but this was not learned in the study. More research here would be valuable.

F. Ways to Improve the Program

The author believes the 1974 Forestry Incentives Program in East Tennessee, while very necessary, was far from successful. Too few owners participated; too few projects were completed; and, most important, too little land was affected. Administrative support was weak. Sources of publicity were lacking. The low completion rate could result in serious consequences. Owners who did not complete projects due to administrative difficulties could become resistive to future forestry programs.

Many problems of the 1974 Forestry Incentives Program can be solved quickly and with minimal administrative difficulties. Others will require long-term solutions. The following suggestions should greatly improve FIP and increase its effectiveness in the study area.

1. Finalize program design. The numerous amendments in 1974 resulted basically from the newness of the program, but several administrators said FIP was "pushed through Congress" and not adequately prepared. Frequent amendments were still being received in the 1975 program. An intensive effort to eliminate administrative problem areas should be undertaken. Changes would then be primarily due to annual budgetary problems and changing economic conditions. These problems do not require frequent adjustments.

2. Start program early in year. The major difficulties due to FIP's late start in 1974 (and 1975) were missing the spring planting season and conflict between FIP's calendar year administration and government's fiscal year. Although projects unfinished in the fall

could be extended into the following spring, unallocated funds had to be returned to the reserves in October. Some owners applied after summer and fall cropping was finished and found the sign-up deadline was past. A January or February start would allow a farmer to consider forestry during his idle winter months and have over a year to complete the project. If budgetary constraints prevent an earlier start, FIP should be managed according to the fiscal year.

3. Establish applicant screening procedure. Many problems occurred because no applicant screening procedure was outlined for the ASCS. A few questions about tract size, size of desired project, past management history, owner's occupation, and past assistance could have distinguished eligible FIP applicants.

ASCS offices were given a checklist-type questionnaire for screening applicants in the 1975 program. When this study was conducted, however, it was too soon to determine the effectiveness of the questionnaire.

4. Remove or modify maximum ownership acreage. A basic premise of FIP is that large tract owners should be willing and able to invest in forestry and, thus, are excluded from FIP. This is not always true. Inherited land, land bought many years previously at a low price, or woodland on a marginal farm often is an economic liability to its owner. The author believes more social and economic benefits would result if all large landowners were given FIP credit for a 500-acre increment, whether or not the entire holding was in one "operating unit." An alternative suggestion is to totally remove the maximum

acreage limitation. Both suggestions apply only to owners with no recent timber sale.

5. Reconsider minimum acreage requirements. Many applicants did not have ten acres to plant. Administrators said this was a common problem in East Tennessee and probably in other areas as well. Several stand improvement projects involved less than ten acres. The author does not suggest total removal of minimum acreage FIP requirements; this could hinder commercial timber production goals. Economic studies are needed to establish the smallest size a stand can remain economically practical; this would be used to regulate planting. Smaller stand improvement projects could be allowed, but only as part of a continuing effort on stands above minimum size.

6. Adjust cost-shares. Cost-sharing maximums often comprised much less than 75% of the total project cost, especially when extensive site preparation or contracted labor was required. Maximums should either be removed or studies conducted to analyze average site preparation, labor, and material costs and cost-shares adjusted to more realistically meet the need.

7. Insure 75% cost-sharing. Some owners profitted from FIP assistance above their project cost. Owners should be required to furnish proof of their expenses and receive no more than 75% of the total.

8. Provide labor assistance. FIP applicants in Tennessee receive no direct assistance to complete projects. State labor crews, such as idle fire control personnel, and equipment should be available at cost

to applicants on a first-come-first-serve basis. Trained forestry crews could be less costly to the owner than the use of untrained farm or contracted labor.

9. Promote vendor services. In 1974, there were no specialized vendor services in East Tennessee. Several summer labor crews aided stand improvement work in 1975. These crews were independently organized by groups of college students; and, being students, they were unavailable for spring planting. Tennessee needs to promote establishment of year-round vendors and refer applicants to them for labor and equipment needs.

10. Increase seedling supply. FIP's late approval was one reason for the 1974 seedling shortage - seedlings take time to produce; also, FIP does not provide funding to increase nursery production. Tennessee must begin now to anticipate FIP demands and re-evaluate seedling allocation priority if future seedling requirements are met.

11. Emphasize stand improvement. Many landowners do not invest in forestry practices due to high cost, high interest rates, and slow investment return (3). Stand improvement has a shorter investment period than planting and can often be done more cheaply. By stressing stand improvement, especially pine release, and providing sufficient technical assistance, Tennessee could enroll more owners in FIP than has been done with emphasis on planting. More pine timber demands could be met in the near future, also. Hardwood stand improvement has extra problems involving selection of individual trees to favor and species identification. Hardwood stand improvement in East Tennessee should be carefully studied.

12. Motivate Extension Service. The Extension Service must be more active in FIP publicity for optimum results. County agents can promote FIP in their offices, in the media, and on farm visits. There must be, however, sufficient motivation by extension project leaders to interest the county agents in forestry and FIP. Extension Service supervisors should insure that their personnel perform adequately in all phases of FIP extension work. The low forestry interest of many agents has been a major problem that may not easily be improved.

13. Increase ASCS forestry interest. The low interest in forestry by ASCS county executive directors also caused many problems in 1974. County directors are selected by local landowners. If these owners have little interest in forestry, the probability is high that they will not purposely seek a director with a keen forestry interest. State ASCS administrators, therefore, must stress the importance of FIP to the local administrators and attempt to instill in them a regard for forestry.

14. Provide more forestry personnel. Governmental austerity programs allowed vacancies to occur in Division of Forestry staffing, thereby increasing the workload of the area and district foresters. Department of Conservation and Division of Forestry administrators should intensify their budget efforts and hire additional personnel. This is an extremely difficult problem in view of the current economic situation and one for which there appears no ready solution.

15. Improve landowner educational programs. Some owners view woodland as an obstacle to farming, others as a source of recreation, and still others as something to be preserved. Commercial forest

management often seemingly conflicts with the desires of these groups. FIP administrators, especially the Extension Service and Division of Forestry, need to educate owners that forestry can be profitable and forest recreation or aesthetics does not have to interfere with profit motives. Moreover, forests can be renewed. The effect of incentives payments toward reducing landowner investment and increasing the rate of return should be stressed. Circulars explaining these aspects of forestry should be distributed to individual landowners and various organizations. Speakers should visit schools (especially vocational agriculture classes) and meetings of landowners, sportsmen, and conservation groups with appropriate visual aids and examples. Assistance from forest industries and associations should be sought.

16. Upgrade FIP communications. Inefficient communications between the administrative agencies and between administrators and applicants interfered with FIP performance. A new approach to information dissemination should be initiated, following the steps outlined below.

a. Agencies need to coordinate publicity activities; each agency should be assigned specific responsibilities and their results evaluated.

b. The state should supply local offices with form letters explaining FIP. The letters would be personalized as needed and mailed to prospective applicants.

c. Effort should be expended to contact all eligible owners, both resident and absentee.

d. Each agency should conduct special FIP promotions, for example, speaking engagements, priority of FIP applications over other programs, and multi-media campaigns.

e. Personal landowner contact should be employed whenever possible.

f. Follow-up communications to applicants should be used to keep interest high and aid landowner problems.

17. Total administration of FIP by forestry agencies. Many problems arose because administrators often lacked forestry knowledge and interest. Forestry incentives programs would benefit if all administrative personnel were cognizant of forestry needs. State forest services and the State and Private Forestry Division of the U.S. Forest Service are two sources of such expertise. New legislation would be required to reorganize the administrative framework. The administrative agencies would require additional staffing and possibly some reorganization, but the results would probably warrant the effort.

V. SUMMARY

The 1974 Forestry Incentives Program had unsatisfactory results in the study area. Less than 1% of the landowners applied for forestry assistance. Only slightly more than 100 acres were treated.

Weaknesses in Tennessee's program included a ten-acre minimum for tree planting, no state-coordinated labor assistance, low cost-sharing rates, and no applicant screening procedure. These problems, combined with others, presented many obstacles to program administration and project completion.

The most important administrative problem was a lack of interest in forestry by ASCS and Extension Service personnel. This resulted in little support for FIP and minimal promotional efforts. Other outstanding problems included insufficient understanding of FIP by the administrators and excessive forester workloads.

FIP applicants faced financial difficulties and time allocation problems as they considered their projects. The physical separation from their property interfered with project work of the absentee-owner applicants.

Suggestions were made to assist FIP administrators improve the program.

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APPENDICES

APPENDIX A

TABLE 23

Education of 1974 FIP Applicants in East Tennessee

Years of Formal Education	Total No/%	Breakdown by Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
8 or less	5 10	0 -	4 24	1 17	0 -
9 - 12	16 31	1 12	5 29	1 17	9 43
13 - 16	18 35	3 38	6 35	1 17	8 38
More than 16	13 25	4 50	2 12	3 50	4 19
Average years of education	14	17	12	15	14

TABLE 24

Occupations of 1974 FIP Applicants in East Tennessee

Occupation	Total No/%	Breakdown by Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Farmer (full time)	6 12	0 -	5 29	0 -	1 5
Business or Professional	21 40	6 75	4 24	4 67	7 33
Wage-earner	10 19	1 12	2 12	1 17	6 29
Trades	2 4	0 -	1 6	0 -	1 5
Retired	11 21	1 12	5 29	1 17	4 19
Housewife	2 4	0 -	0 -	0 -	2 10

TABLE 25

Percentage of Total Income Derived from the Land of 1974 FIP Applicants in East Tennessee

Percentage of Total Income	Total No/%	Breakdown by Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Over 75	4 8	0 -	3 18	0 -	1 5
51 - 75	1 2	0 -	1 6	0 -	0 -
26 - 50	4 8	1 12	2 12	0 -	1 5
10 - 25	5 10	0 -	2 12	1 17	2 10
Less than 10	15 29	2 25	5 29	2 33	6 29
None	23 44	5 62	4 24	3 50	11 52

TABLE 26

Breakdown by Practice of Project Approvals for the 1974 Forestry Incentives Program in East Tennessee

Project	Total No/%	Approvals by Study Area L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Tree planting	17 59	5 83	6 86	3 100	3 23
Stand improvement	23 79	4 100	9 90	3 100	7 58
Total approvals	40 72	9 89	15 94	6 100	10 39

TABLE 27

Completions of 1974 FIP Projects in East Tennessee, Relating Applicant's Residence to Competion

	Proportion of Total Completions	Completion Rate by Residence and Practice		
		Planting	Improvement	Total Group Completions
	No/%	No/%	No/%	No/%
Resident owner	8 73	3 20	5 26	8 24
Absentee owner	3 27	1 7	2 20	3 12

TABLE 28

Completions of 1974 FIP Projects in East Tennessee, Relating Applicant's Education to Completion

Years of Schooling	Proportion of Total Completions No/%	Completion Rate by Practice and Educational Category		
		Planting No/%	Improvement No/%	Total Category Completions No/%
8 or less	1 10	0 -	1 33	1 25
9 - 12	3 27	2 33	1 25	3 30
13 - 16	4 36	1 17	3 38	4 29
Over 16	3 27	1 17	2 33	3 25

TABLE 29

Completions of 1974 FIP Projects in East Tennessee, Relating Applicant's Income to Completion

Income Range	Proportion of Total Completions No/%	Completion Rate by Practice and Income Category		
		Planting No/%	Improvement No/%	Total Category Completions No/%
Less than $5000	1 9	0 -	1 25	1 12
$5000 - $9999	2 18	1 50	1 25	2 33
$10,000 0 $14,999	2 18	1 50	1 20	2 29
$15,000 - $24,999	3 27	1 33	2 33	3 33
$25,000 or more	3 27	1 17	2 40	3 27

TABLE 30

Completions of 1974 FIP Projects in East Tennessee, Relating Applicant's Occupation to Completion

Occupation	Proportion of Total Completions No/%	Completion Rate by Practice and Occupation: Planting No/%	Improvement No/%	Total Occupational Group Completions No/%
Business/ Professional	7 64	3 33	4 40	7 37
Farmer	2 18	0 -	2 50	2 40
Retired	1 9	0 -	1 17	1 10
Trades*	1 9	1 100	0 -	1 100
Wage-earner	0 -	0 -	0 -	0 -

*Only one applicant in category was approved.

TABLE 31

The Most Important Sources of FIP Information for 1974 FIP Applicants in East Tennessee

Sources	Total No/%	Sources by Study Area* L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
ASCS	27 52	6 75	4 24	3 50	14 67
Forester	25 48	5 62	15 88	2 33	3 14
Extension agent	4 8	1 12	1 6	1 17	1 5
Other	5 10	0 -	2 12	1 17	2 10

*Percentages may be greater than 100% because some owners listed more than one source.

TABLE 32

Factors Necessary to Induce Re-application of 1974 FIP Applicants in East Tennessee

List in Order of Importance	
Labor source	
Greater cost-sharing Time available to work on the project Purchase more eligible land	*
Reduce minimum acreage for tree planting	
Determine an actual need for the project Personal use for the thinned timber or permission to sell it Simplify required procedure	*

*Grouped factors with equal relative importance.

TABLE 33

Previous Use of Professional Forestry Services by 1974 FIP Applicants in East Tennessee

		Responses by Study Area			
Frequency of use	Total No/%	L-1 No/%	H-1 No/%	L-2 No/%	H-2 No/%
Never	34 65	6 75	12 71	2 33	14 67
Seldom	6 12	0 -	1 6	0 -	5 24
Routinely	12 23	2 25	4 23	4 67	2 9

APPENDIX B

Questionnaire for Foresters, ASCS Personnel

1. How long have you been with the (Division of Forestry, ASCS)?

2. How long have you been at your present station? (If no longer stationed at the area in question, how long was he there before transfer?)

3. Approximately how many landowners eligible for FIP are there in your counties of responsibility?

4. How many landowners in your county(ies) participated in FIP?

5. How much money in FIP cost-sharing funds was spent in your county(ies)?

   How much was initially allocated for each county?

   Where did the extra money spent come from? OR

   What was done with the surplus?

6. Were there any rejected applicants in your counties?

   Yes

   No

   If yes, why were they rejected?

7. Do you feel that, after its first year, FIP was a success in your county(ies)?

   Yes

   No

   Why or why not?

   How do you judge success of a program such as this?

   a. number of landowners contacted
   b. number of landowners participating
   c. percentage of contacted owners who participated

d. approved acreage
e. amount of money spent
f. other (specify)

8. Why do you think the participants decided to take advantage of FIP?

a. progressive landowner, leader
b. interested in forestry
c. chance to improve land with minimum personal investment
d. other (specify)

9. Why do you think landowners who knew of the program rejected it?

a. non-progressive landowner, follower
b. general economic situation
c. dislike government programs
d. lack of interest
e. other (specify)

10. Do you see a basic difference in the type of landowner who participated in FIP and those that did not?

Yes

No

If yes, how do they differ?

a. size of holding
b. age
c. education
d. income
e. other (specify)

11. How were landowners in your area informed of FIP?

By whom?

a. ASCS
b. county agent
c. forester
d. other (specify)

By what method(s)?

a. personal contact
b. mailing
c. mass media
d. other (specify)

12. Do you think a program such as FIP should strive for

    (a) participation of a few landowners applying for larger acreages

    OR

    (b) participation of many landowners applying for smaller acreages,

    assuming the total affected land in each case is approximately equal?

    Why?

13. How do you see the actual role you plan in FIP administration as compared to the role you are supposed to take?

    How does this affect administration and results of FIP?

14. Are there any problems in the working relationships between you and the

    a. county agent
    b. service forester
    c. ASCS
    d. landowners

15. How well do you feel the following agencies performed their FIP role?

    a. Extension Service
    b. forester
    c. ASCS

16. How do you think the administration of FIP could be improved or made more efficient?

Example of Cover Letter Accompanying Landowner Questionnaires Which Were Mailed

Dear _____

I am presently engaged in a study of the 1974 Forestry Incentives Program. Through the Agricultural Stabilization and Conservation Service and the Tennessee Division of Forestry, I learned that you applied for cost-sharing funds through FIP. My study, which will be my thesis for completion of a Master's Degree in Forestry from the University of Tennessee, seeks to learn the reasons for the poor success of FIP in East Tennessee. From this, I hope to make recommendations which will aid in improving both this and future landowner assistance programs.

To complete my study, I need your assistance. Would you please complete the following questionnaire and return it in the enclosed envelope as soon as possible. The success of the project depends upon a reply from every landowner who applied for FIP cost-sharing.

Thank you very much for your time and effort in assisting me.

Sincerely,

Joe D. Lovelace

Questionnaire to Landowners Concerning the 1974
Forestry Incentives Program

Joe Lovelace

1. What is the total acreage of the tract in _____ County, Tennessee, for which you applied for cost-sharing funds through the 1974 Forestry Incentives Program?

   _____ Acres

2. About what percentage of this land is forested?

   a. 0 - 20%
   b. 21 - 50%
   c. 51 - 75%
   d. over 75%

3. Is your residence on this tract?

   a. Yes
   b. No

   If "No," approximately how far from the tract do you live?

   a. less than 10 miles
   b. 11 - 50 miles
   c. 51 - 150 miles
   d. over 150 miles

4. Which one of the following classifications of ownership applies to you?

   a. individual - you hold full title to the land
   b. lease - you rent or lease the land from another owner
   c. partnership - joint ownership with one or more other individuals
   d. corporation - land owned by a business organization
   e. other (please specify)

5. For which practice(s) did you apply for assistance through the 1974 Forestry Incentives Program (FIP) and for how many acres?

   a. tree planting, RE-3 _____ acres

   b. timber stand improvement, RE-4 _____ acres

6. Was your application for cost-sharing funds approved?

   a. Yes
   b. No

   If "No," skip to Question #13
   If "Yes," continue to Question #7

7. Was any work performed on the approved project?

   a. Yes
   b. No

   If "No," for what reason(s) was no work done? Specify the most important reason.

   If "No," skip to Question #14.
   If "Yes," continue to Question #8.

8. Who performed most of the labor on the project?

   a. myself and/or my family
   b. regular farm help
   c. I hired outside labor for the project
   d. other (please specify)

9. Did you have any difficulty obtaining labor to assist in the project?

   a. Yes
   b. No
   c. Did not seek outside labor

10. Was your project under the Forestry Incentives Program completed?

    a. Yes
    b. No

    If "No," what was/were the reason(s) it was not completed?

    a. lost interest
    b. more important jobs came first; lack of time
    c. financial difficulties
    d. lack of assistance from state - no trees, could not schedule visit with forester
    e. other (please specify)

10. (continued)

If "No," what was the main reason the project was not completed?

How much money would you estimate that you spent on the project?

$_____

If your project was not completed, skip to Question #14
If your project was completed, continue to Question #11

11. Were there any instances when you felt you would not be able to complete the project?

a. Yes
b. No

If "Yes," what were the reasons for the difficulties?

12. How much did the work cost you above the cost-sharing funds you received?

$_____

Skip to Question #14

13. (Only if "No" to Question #6)

Why was your application not approved?

a. insufficient acreage to qualify for desired practice
b. tract size too large
c. practice not needed, according to forester
d. I voluntarily withdrew application, it was not rejected
e. other (please specify)

If (d), why was application withdrawn?

a. I changed my mind
b. I misunderstood the goals and requirements of FIP
c. sold or transferred property
d. other (please specify)

14. Would you have considered or carried out the applied for practice without FIP cost-sharing?

a. Yes - would have considered
b. Yes - would have carried out, although possibly not as fast
c. No

15. Do you plan to, or would you consider, again applying for funding under FIP?

    a. Yes - I plan to apply again
    b. Yes - I may consider applying
    c. No

    If "No," what is major reason you would not apply again?

    If "Yes, consider" or "No," what would be necessary for you to again apply for cost-sharing?

16. Where did you <u>first</u> learn about the availability of FIP?

    a. read about it in newspaper or magazine
    b. heard about it on radio or TV
    c. contacted by ASCS
    d. contacted by service forester
    e. contacted by state extension agent
    f. other (please specify)

17. Where did you obtain most of your information about the program?

    a. radio, TV, newspaper, or magazine articles
    b. information from ASCS
    c. information from service forester
    d. information from extension agent
    e. other (please specify)

18. At the time of your application, how well do you feel you understood the objectives of the Forestry Incentives Program?

    a. understood fairly well
    b. some understanding, but clarification needed on some points
    c. poor understanding at time of application

19. As far as your own experience with FIP is concerned, did you have any complaints concerning the administration of the program?

    a. too much red tape
    b. restrictions too limiting
    c. difficult to arrange appointments with forester
    d. difficult to obtain seedlings for planting
    e. poor communication of program goals
    f. other (please specify)

20. Before FIP, how often did you use professional advice for managing your woodland?

    a. never
    b. seldom - only when problem or real need arose
    c. often - used professional services as part of routine operation

21. What is/are the major factor(s) which keep you from managing your woodland at the highest possible level?

    a. physically unable
    b. financially unable
    c. small acreage
    d. poor condition of woodland
    e. better use of land
    f. forestry not consistent with other objectives
    g. no available labor
    h. low profit in forestry
    i. forestry takes too long
    j. lack of forestry knowledge and/or skills
    k. holding timber for emergency
    l. ruin aesthetics and/or recreation
    m. other (please specify)

22. What is/are your major reason(s) for owning the tract?

    a. income
    b. home site
    c. recreational opportunities
    d. investment
    e. other (please specify)

23. What are your future plans for your woodland?

    a. manage for timber production
    b. clear for pasture/cropland
    c. leave as is
    d. no plans at present
    e. other (please specify)

Now I need a little additional information about yourself to aid in analyzing the data.

What was your age on your last birthday?

_____ years old

What is your occupation?

Please circle the last year of formal schooling you completed.

1 2 3 4 5 6 7 8	9 10 11 12	13 14 15 16	17 18 19 20
grade school	high school	college	graduate work

MS/MA Ph.D
graduate degree
received

Following are several ranges of annual income. Would you please circle the one which is closest to your annual gross income?

a. less than $5000
b. $5000 - $9999
c. $10,000 - $14,999
d. $15,000 - $24,999
e. $25,000 or more

Approximately what percentage of your total income is earned from your land?

a. over 75%
b. 51 - 75%
c. 26 - 50%
d. 10 - 25%
e. 1 - 9%
f. no income derived from the land

VITA

Joe D. Lovelace was born in Knoxville, Tennessee, on July 22, 1948. He attended elementary schools in that city and was graduated from Central High School in June, 1966. He entered the University of Tennessee the same month. He worked during the summers of 1967 and 1968 with the United States Forest Service on the Kootenai National Forest in Libby, Montana. He was active in the UT Forestry Club and was elected its president for the 1969-70 school year. He received the Bachelor of Science Degree in Forestry in June, 1970.

He entered the US Army in January, 1971, and was honorably discharged in February, 1974, following duty in West Germany.

He enrolled in the Graduate School of the University of Tennessee in March, 1974, and received the Master of Science Degree in Forestry in December, 1975. He is a member of the Society of American Foresters and Forest Farmers Association.

He is married to the former Marie Theresa Palumbo of Newark, New Jersey. They have one child, Michael David.