# RECRUITMENT, DEVELOPMENT, AND RETENTION OF CONTRACTORS IN THE SOUTHERN UNITED STATES

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# **ABSTRACT**

The efforts of the southern forest industry relative to the development of a viable corps of independent logging contractors is discussed. The transition required various levels of support: education program, technical assistance, financial support, altering the wood specifications and transportation methods, and defining an appropriate technology. No single stimulus or approach can be credited with the change.

INTRODUCTION

The wood shortages of the 1950's brought an awareness that the rather casual system of wood supply which developed in the post-World War II era was not adequate to support the industrial expansion taking place. This system, heavily dependent upon wood dealers, who handled the purchase and production of wood for a flat fee per cord, lacked the motivation to support the changes that were required. An entrepreneurial force was lacking. The producers, under the dealer system, were often nothing more than sharecroppers, working with used equipment financed by the dealer. The isolation of the harvesting contractor from the mill resulted in confused and misinterpreted communication. The production level per crew was low, the average less than 75 short tons per week (Hamilton et al., 1961).

The Battelle report and other industry studies pointed to the need for transforming harvesting from a part-time cottage industry into a vital business. The missing component was the entrepreneur. People willing to devote their savings, energy, and abilities to timber harvesting were needed if the potential of the industry was to be realized. The characteristics of the individuals desired could be identified. Where they would come from and how they would be brought on-line could not.

Was it possible to develop a cadre of independent businessmen who had the ability to:

- Put together sufficient capital to mechanize;
- 2. Attract the quality of labor required by the emerging systems;
- 3. Develop the business management skills to survive in the increasingly complex and business environment;
- 4. Develop the necessary mechanical skills to support mechanized equipment; and
- 5. Demonstrate the community relations skills necessary to buy timber and maintain a favorable image for the industry.

The contractor force in the field at the time were good at working men and mules. The dealer system, which encouraged contractors to rely on local timber brokers for stumpage, financing, and business management support, predominated. The out-migration from rural communities tended to be selective. The brightest and most aggressive were most likely to pursue careers and professions in the rapidly developing regional center.

The state of the industry at that time tended to emphasize the skills of managing transitory, menial labor, not necessarily those required to operate a business. Was it possible to help these contractors, who had a knowledge of pulpwood harvesting, make the transition to businessmen? Or, should efforts instead be directed at bringing successful businessmen from other fields into harvesting and providing them with the necessary harvesting lore? The questions were made doubly complex because of the uncertainty about the nature of future harvesting technology. If mechanization developed from in-place agricultural and construction equipment, the probability of finding contractors capable of supporting it in the local population was quite good. If mechanization developed from purpose-built complex equipment such as the Koehring Harvester, the Bush Combine, and the prototypes under development in Scandinavia, special skills and large inputs of capital would be required.

# **APPROACHES**

A variety of approaches for recruiting and developing contractors were put in motion. Timber harvesting specializations were added to high school vocational agriculture programs. Pulp and paper companies loaned equipment, provided timber, and even supported the development of scaled-down knuckleboom loaders for manual training. Similar, but more advanced, programs, were started at several

community colleges. The American Pulpwood Association prepared a textbook, Pulpwood Production (Bromley, 1968) for use in these courses. At least one four-year program was started at an agricultural and mechanical college with a large minority enrollment.

The pulp and paper industry took a direct role in supporting existing contractors. Many established a direct purchase alternative, where they dealt directly with the contractor, to the dealer system. Some paid bonuses to contractors who mechanized, in the form of an additional dollar per cord for wood produced with a skidder or loaded with a hydraulic loader. Others established a pool of funds available to contractors working to purchase equipment, to be paid back on a per-unit basis, when the machine was in service. Others started company operations which were to serve as a training ground for both supervision and labor. The company would support the operation while it went through the throes of shakedown and crew selection. Company personnel would assist the foreman in labor management and business skills. When the system had stabilized, it was sold to the foreman at its depreciated value.

Other companies would co-sign notes for contractors, or maintain an inventory of used or back-up equipment to assist contractors faced with extensive down time on a machine or a special need. The more progressive dealers followed, and sometimes lead, in strategies supporting mechanization.

Nearly every company had a logging specialist in a staff position who had the responsibility of assessing harvesting technology and assuring that the transition went smoothly. Trade associations provided workshops and short courses for professional foresters to keep them current with changes in wood procurement and harvesting technology. Management put the structure of the whole wood supply system into play. Restrictions on diameter, length, method of delivery, and point of delivery were relaxed. There was a willingness to transfer some of the processing responsibility from the forest to the woodyard or mill. Delivery points could accept longwood and tree-length material along with the traditional shortwood. Mill woodyard hours were extended to support long-distance hauling by truck.

The lumber industry flourished, with an increase in the number of permanent mills equipped with debarkers and chippers supplying digester-ready furnish. These mills, especially stud log and plywood plants, added a new market for forest products, further increasing the marketing options available to the contractor.

The changes were not without trauma. Traditional boundaries between professional disciplines and industrial units were breached, and the industry struggled through a significant redefinition. Some well-established components of the wood supply system floundered. The railroads, for example, long the major transporter of pulpwood, were unable or unwilling to keep pace. Trucking became the dominant form of transport.

The demographic shifts and social upheaval were not as severe as originally anticipated. The completion of the interstate highway system and aggressive rural industrial development programs by many of the states expanded employment opportunities closer to home. The promising young person from a rural Southern town no longer had to move to Atlanta, Baltimore, or Detroit to prosper. Woods work became more attractive as the heavy lifting component was removed. The industry could no longer afford to be the employer of last resort.

#### **OUTCOMES**

The net effect was an embarrassment of riches. The industry, from the late '70's on, has faced a surplus of capacity. The problem is one of bringing supplier capacity downward to meet demand in an intelligent and humane fashion.

Several insights can be drawn from this experience which may or may not be useful in the New Zealand environment.

- The training efforts were only marginally productive. The retention rates at all levels were poor. (The Vietnam conflict may have complicated the situation. High school graduates were eligible for the draft and did not return to the industry for several years after graduation, if at all. The intervening years made tracing them very difficult.) Most of these programs have folded. Graduates from more general programs-business forestry, diesel mechanics and welding--are meeting the industry's needs.
- The attempts to describe the characteristics of a successful contractor from those active at the time resulted in information which had value in the short run, but less long-termutility. A desirable characteristic identified in 1970, for example, was military service as a non-commissioned officer. Sergeants are good at leading men, but not necessarily good at managing businesses.
- 3. Technological evolution is a key factor. Much of the early thinking concentrated on changing the contractor and his equipment while holding the remainder of the economic system constant. As the transition developed, the changes which expedited the process were more widespread. The change in the delivery form of wood probably had the greatest effect on the entire system.

- 4. Mechanization must match the contractor force. The machine types which proved successful in the South were those which developed from agricultural and industrial equipment common in the region. Single-function machines, often simple attachments to industrial bases, proved the most successful. Purpose-built equipment, such as the skidder, was developed from common components. Complex, multi-function machines which captured the imagination of engineers and professionals faded from the scene.
- Machines which can achieve a break-even level of production at modest levels of operator proficiency served best. These tended to simplify the transition period and generate success stories.
- 6. Don't be afraid to make a few contractors wealthy. The business opportunity should attract people with a broad range of business abilities. This will mean some will succeed, some will fail, and some will be very successful. Efforts to force these very successful operators back into the pack often have a greater impact on the pack itself than on the outliers. More importantly, such strategies send signals that some success will be tolerated but the individual's future is controlled.
- 7. Look outside the industry for entrepreneurs. A study by Corwin found that most successful contractors had previous experience in other businesses. The key is identifying successful contractors, not necessarily loggers. External experience brings fresh insights and experiences which break down stereotypes.
- Developing the proper balance between security and independence is difficult. Too much security during the early stages of the contract relationship can discourage

the development of survival skills. Too little can lead to premature failure.

# THE CURRENT STATE

Concrete measures of the development of the contractor force can be derived from surveys conducted by the Mississippi Agriculture and Forestry Experiment Station. Two surveys, one conducted in 1979 and one from 1987, will be used (Weaver et al. 1981; Watson et al. 1989).

In 1979, only seven percent of the contractors had the capability to produce over 250 short tons of wood per week. By 1987, fifty percent of the contractors had that capability. In the intervening eight years, the age of the average producer increased by 3.7 years. This average was moved upward by a decrease in the number of contractors younger than thirty. The average education had increased from 8.8 to 12.5 years of school. Average productivity per operation increased from 180 short tons per week to 575.

During this period between producer surveys (1979 to 1987), pulpwood consumption increased from 132 million to 160 million short tons, slightly more than 20 percent (APA, 1989). During the longer transitional period (1966 to 1968), pulpwood consumption doubled, from 83 to 163 million short tons. If labor productivity had remained at 1966 levels (4.5-5 tons per man-day), meeting 1988 wood orders would have required 250,000 people in the woods wielding chainsaws and hand-loading trucks.

The contractor force is increasingly considered an integral part of the industrial supply system. Increases in wood costs have not had to keep pace with increases in the Consumer Price Index because the contractors have become more efficient as they have become more productive. Consuming indus-

tries have been able to reduce inventories because of more dependable suppliers.

Working conditions, status, pay scales, and job tenure have improved for woods workers. As a result, contractors can compete effectively with other forms of employment.

The process of change is not complete. The dynamics of the industry preclude stability. The overcapacity problem will be solved by further reductions in the small and underfinanced segment of the contractor force. Legal and social pressures will increasingly force additional changes in operating methods.

Did the industry's efforts direct, aid, or have no effect on the type and rate of change? Looking back on the process, it appears that the industry's major contributions were initiating the process and providing support through a willingness to change their method of operation to accommodate changes as they took place. This left considerable room for the creativity, energy, and intelligence of the contractors to shape the process to local needs.

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