Guidelines for Establishing

FORESTRY COOPERATIVES

by Gilbert P. Dempsey and
Clyde B. Markeson

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The Authors

GILBERT P. DEMPSEY is an agricultural economist at the Northeastern Forest Experiment Station's Forest Products Marketing Laboratory in Princeton, West Virginia. A project leader for research in marketing and industrial opportunities, he holds a Bachelor of Science degree from the University of Kentucky, a Master of Science degree from Ohio State University, and is a candidate for the Ph.D. degree from Ohio State University. Before joining the U. S. Forest Service in 1964, he was employed by the Ohio State University and the Ohio Agricultural Experiment Station.

CLYDE B. MARKESON is director of the New Services Division, Farmer Cooperative Service, U. S. Department of Agriculture, in Washington, D. C. He holds a Bachelor of Arts degree in economics from Idaho State College and a Master of Science degree in agricultural economics from the University of Idaho. Before joining the Farmer Cooperative Service in 1958, he was employed by the Department of Agriculture's Economic Research Service.

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IF YOU are thinking about starting a forestry cooperative, the best advice anyone could give you is: before taking any action, consider all the benefits and advantages, and then consider all the pitfalls and problems.

Certainly cooperative action has many advantages; and many cooperative businesses have enjoyed great success. But most of the forestry cooperatives tried in the United States have failed as businesses.

Of the 68 forestry cooperatives started in the United States in the last 50 years, 47 are no longer operating. Why didn't more of them succeed? Most of the cooperatives established before 1961 went out of business for one or more of the following reasons: insufficient interest and support by members, inadequate capital, lack of a sufficient volume of business, or inadequate management.

Still we believe that there is a place for the forestry cooperative in our economy. And an increasing interest has been shown in the cooperative business structure as a means for developing better timberland management and more efficiency in marketing forestry products. This interest is evidenced by the organization of 11 forest-based cooperatives since 1961, the establishment of an interagency committee by the U. S. Department of Agriculture to assist in developing forestry cooperatives, and the development of forestry cooperative advisory groups in most states as part of the Rural Areas Development program.

The Forest Products Marketing Laboratory of the U.S.D.A. Forest Service's Northeastern Forest Experiment Station has been studying the history of the forestry cooperative, and has analyzed the experiences of the cooperatives that have failed as well as those that have succeeded. In addition, the New Services Division of the U.S.D.A. Farmer Cooperative Service has a continuous program of research to assist members and managers of cooperatives. Out of these studies we can offer some practical guidelines to any group that is thinking about starting a forestry cooperative. Here are the highlights:

WHAT IS A COOPERATIVE?

Understand how cooperatives differ from other forms of business organization. Know the advantages of group action, but understand that organizing on a cooperative basis cannot by itself guarantee success.

PEOPLE INTERESTED?

Identify the origin and nature of the interest, and the motivations of the people interested. If interest is lacking, postpone action till interest is expressed.

COMMUNITY ATTITUDES?

Determine how the community might react toward a new cooperative, or to other forms of business organizations.

ECONOMIC JUSTIFICATION

Conditions favor a cooperative only when existing commercial facilities or services are inadequate, costs for services are too high, or prices received by woodland owners or timber processors are too low. If a competitive situation exists, the justification for a cooperative must be strictly economic.

TYPE OF COOPERATIVE?

Determine the type of forestry cooperative needed in light of the expressed interest, the services needed, the available volume of business, and the markets to be served. For the type selected, outline the activities or services to be performed.

RAW MATERIAL SUPPLY?

Inventory the present and prospective timber resource and its commercial availability within the proposed cooperative's operating territory. Determine whether the resource will sustain management, processing, or marketing activities under the limiting conditions.

PARTICIPATION?

Find out who will support a cooperative before—not after—organizing, and the extent to which prospective members will participate in its affairs. Identify the communication difficulties likely to be encountered between management and members, and devise methods for avoiding or overcoming these barriers.

MARKETS?

Inventory the number and characteristics of potential market outlets within the operating range. For each market outlet, determine its normal volume requirements that would affect the plan of operation. Decide how the cooperative can best serve its market outlets while adequately serving members' needs.

FINANCING?

Determine the amount of capital required for initial investment, working capital, and expansion; and ascertain the amount of capital that can be obtained from all sources. Members should provide a substantial portion of the total capital requirements. Design a financial structure that is conservative but flexible and growth-oriented.

LABOR AND MANAGEMENT

Determine the availability of labor with the needed skills. Develop a training program where needed skills are lacking. Identify the qualifications required of a manager. Decide whether operations should begin with a part-time manager.

ORGANIZATIONAL CONSIDERATIONS

Use whatever assistance is available from both private and public organizations. Seek legal counsel in formulating the cooperative's organizational structure and business documents.

WHAT IS A COOPERATIVE?

The prospective members and organizers of a cooperative ought to understand fully how this type of organization differs from other forms of business organization. They should realize both the major advantages and the limitations of group action.

A cooperative is a business organization of member-patrons who work together for mutual benefit in marketing products, purchasing supplies, or obtaining services at cost.

A member of a cooperative serves a dual role as patron and owner. As patron, he is responsible for actively supporting his organization. As owner, he is responsible for participating in the affairs of the organization. Hence, as owner-patrons, members share responsibility for the success or failure of their cooperative.

Unlike the general business corporation, savings above the cost of doing business are returned to patrons in proportion to their use of the cooperative rather than in proportion to their dollar investment. Some cooperatives do pay moderate dividends before paying patronage refunds, but such stock dividends are ordinarily limited by their bylaws to 6 percent or less.

Democratic control is another characteristic that distinguishes a cooperative from the general business corporation.

In an investor-oriented corporation, where the objective is to maximize returns on invested capital, voting is on a stock basis. In a cooperative, voting is on the basis of one-member, one-vote; or on the basis of the amount of business the individual contributes, regardless of the amount of stock he holds. The primary objective of a cooperative is to render services at cost.

If invested capital were the basis of control in a cooperative, a few members with large investments could outvote a majority who might be the major patrons. They could decide the services to be rendered and vote for large dividends. Hence the very purpose of a cooperative effort—to provide needed services at cost—would be defeated.

MERITS OF GROUP ACTION

Group action enables member-patrons to solve problems, obtain or provide services, and gain efficiencies they often cannot attain through individual action (fig. 1). For example:

A group arrangement can help woodland owners to operate small tracts of merchantable timber scattered over wide geographic areas, thus permitting them to cut on a commercial basis. As a result, timber stands in an area can be given better care and management.

Marketing timber of comparable species, grade, and size as one lot, rather than as several lots sold individually, enables growers and processors to better serve buyers' needs.

By consolidating the money they are able to pay for management, woodland owners and processors are in a better position to pay salaries needed to attract and keep capable managers. They can also better afford to hire woods personnel needed for efficient operations.

By pooling finances, producers can afford to purchase specialized expensive equipment such as large tractors, transport vehicles, debarking machines, and similar equipment needed for large-volume operations. By pooling orders for supplies and

Figure 1. — In areas like this farmland, where timber stands are small and scattered, there is economic justification for a forestry cooperative association. Through cooperative action a group of small owners can get management and marketing services that as individuals they could not afford.

equipment, forest owners and processors can obtain discounts for quantity purchases and can also reduce costs of transportation. And, by incorporating as a cooperative, member-patrons can increase the possibility of obtaining financial assistance from both public and private sources.

This list of advantages associated with group effort is by no means complete. It merely suggests some advantages group efforts offer over individual operations.

PREORGANIZATIONAL CONSIDERATIONS

A forestry cooperative must be organized so as to capitalize on existing conditions. Since conditions vary from area to area and in individual circumstances, no set procedure can be recommended that applies to the formation of all types of cooperatives. However, certain guidelines can be set forth that will be helpful when considering any type of cooperative activity as a means for developing better forest-land management, timber processing,

and marketing. Appropriate modifications can be made in the criteria to suit prevailing conditions.

Interested People

The first consideration should be the origin and nature of interest in developing a cooperative. Does this interest stem from within the area under consideration, or from an outside source? What are the motivations of those expressing interest? Are these persons business leaders, innovators, or followers? If initial interest in a cooperative does not originate from local sources, can a substantial and sustained interest be developed? Answers to these questions may serve as a basis for deciding whether to proceed with a feasibility study.

Interest can stem from many sources: woodland owners, primary processors, other manufacturers that rely on the products to be handled, or others interested in developing improved woodland management and marketing. The degree of local interest developed is especially important. Most of the recently organized forestry cooperatives held off making capital investments until a minimum number of prospective members signed preorganizational contracts or purchased stock.

The presence of interested local producers—particularly community leaders—who will take an active part in the organizational effort and subsequent operations of a new cooperative often means its success. If such people are not interested, it may be advisable to postpone organizational work until they do become interested.

Closely identifying the interest is also important because it partially determines the form of business organization that might be established. If the organization is to be owned and controlled by woodland owners, it can be incorporated as a bona fide agricultural cooperative. The business might then be eligible for loans from the district banks for cooperatives of the Farm Credit System.

If the organization is to be owned and controlled by other than woodland owners, the group could incorporate to perform certain services as a cooperative association but would not qualify for loans from the banks for cooperatives. In contrast to a regu-

lar corporation, however, such an association might qualify for certain exemptions under the Internal Revenue Code.

If those expressing interest are members of an existing cooperative, or have had previous satisfactory experience with such an organization, they are more likely to participate in a new cooperative effort. On the other hand, if prospective members lack cooperative experience, or have had unsatisfactory experiences, they are apt to be less enthusiastic about participating.

An absence of interest within a proposed survey area may be due to a lack of knowledge about the cooperative business structure and potential benefits of group action, or a lack of communication among resident woodland owners and nonresident owners. And some who have latent interest in forming a cooperative may be persuaded by subtle pressures or other means to preserve the status quo. There may be dissension, factionalism, and unusually harsh competition—especially among small processors—promoted by vested interests that would either prejudice or prevent constructive communication. Cooperative action may have been discussed and deemed unworkable, or there may be a lack of leadership in the area.

If local interest is lacking, but there appears to be a need for some type of forestry cooperative, educational work may have to be done. Both present and projected interest resulting from an educational program should therefore be considered essential parts of a feasibility study.

Community Attitudes

The attitudes and reactions of business people and others in the community toward cooperatives can help or hinder a new cooperative's activities. Although neither a negative nor passive attitude will necessarily prevent the cooperative from carrying out its objectives, a favorable community reaction toward the organization will help increase its acceptance among potential members and will make operations easier. Accordingly, community attitudes and expected reactions toward the proposed cooperative should be ascertained. And the possibility of changing or modifying community attitudes should also be taken into consideration.

Economic Justification

If there is enough interest in forming a cooperative, then the organizers must decide on the economic justification for the business. Is the purpose of the cooperative to satisfy an economic need? Or is the purpose to satisfy a noneconomic need such as: (1) a social welfare program to provide employment, vocational training, or similar activities without regard to economics of the program; (2) an experiment or pilot project to test a hypothesis; (3) a program contrived to promote an idea; or (4) a program to enhance the aesthetic, nonprofit recreation values of an area?

Distinguishing between an economic and noneconomic justification is important because: (1) the organization's purpose, functions, and goals can be more clearly defined; (2) the particular need or combination of needs will affect all decisions and activities of the organization; (3) the degree of success of the enterprise can be predicted within certain limits by realistically determining the needs to be satisfied and the economic resources available such as land, labor, capital, and management; and (4) making the distinction helps to determine if subsidization is justified, if a certain amount of capital can be generated for investment, or both.

In a competitive market, justification for a new business organization must be strictly economic if it is to survive without direct or indirect subsidies. Such subsidies may take the form of grants or unusually low-interest loans, preferred treatment or protection in the market place, free administrative or technical assistance, or special treatment with regard to purchasing publicly owned timber.

The purpose of a cooperative is not to eliminate marketing functions or services, but rather to consolidate these activities for more efficient operation or to provide services not available from existing outlets. If the group operating through a centralized unit cannot operate at least as efficiently as an alternative economic system, there is no economic justification for the organization. If it operates more efficiently, the results will be evident

in terms of increased monetary returns, improved services, or both, to individual members.

The effect on existing businesses resulting from establishing a new cooperative should be considered. Often the point is made that a new business should not duplicate existing services within the marketing area. Except for publicly regulated utilities, monopolies are not usually considered to be in the best interest of the consumer nor inherently efficient. If efficiency of distribution can be improved—even at the cost of substituting one system for another—perhaps a change should be made. Landowners and consumers need not subsidize an inefficient operation or system if there is an alternative that will not require subsidization.

Some criteria for objectively evaluating the economic justification for a cooperative are:

- Will the business provide new activities or services not available from the present production or marketing system? If so, there is need to estimate the probable demand for these activities and the probable cost or benefit. Unless a new activity will result in greater returns to patrons in the long run, it should not be undertaken.

- Can the new cooperative perform the same activities and provide the same services as the present or alternative system, with equal or better efficiency, at equal or less total average cost? Operating at equal costs may not improve economic efficiency, but landowners may wish to vertically integrate their production and marketing processes—even though their cooperative's efficiency is no greater than that of the present system—if it enables them to employ idle land, labor, management, and capital resources. Integration also enables them to maintain control over their product further along the channels of distribution.

- If the present marketing system is considered inadequate, unfair, or inefficient, will the new cooperative bring members' returns up to or above competitive market prices prevailing for similar products produced under comparable conditions and sold in other markets?

If market outlets do not exist, the reasons should be determined. This situation may prevail because of: (1) fragmented forest acreages that are uneconomical to harvest; (2) an insufficient volume of merchantable species or inadequate quality of timber; (3) a significant amount of the timber resource unavailable for commercial use; (4) inaccessibility of timberlands; (5) insufficient knowledge of the profit potential from the forest resource; or (6) other barriers to profitable investment in the area's wood industry.

If market outlets exist, private capital investment will generally flow into an area if an adequate return can be realized. If the area's timber resources and production potential have not previously attracted private capital, one should consider whether it is reasonable to expect a business capitalized from any source to survive without subsidization.

Type of Cooperative

Once the economic justification for starting a forestry cooperative has been determined, it then becomes necessary to outline the specific types of activities to be performed by the cooperative and the type of organization necessary.

Some of the activities that might be considered are: (1) woodland management services; (2) marketing services; (3) combined management and marketing services; (4) custom processing activities; (5) processing and marketing activities and services; (6) management, processing, and marketing services; and (7) an integrated operation providing management, processing, secondary reprocessing for specific business users, manufacturing, and wholesale marketing. The following types of cooperatives, classified according to the major function performed, might be developed to provide one or more of these services:

Management cooperative.—Services provided in this category could range from timber cruising and developing forest management recommendations to providing complete management services under a long-term contract (fig. 2). Services might include one or more of these activities: surveying, cruising, and developing either limited or comprehensive management plans; supervising production and maintenance programs; and, harvesting and

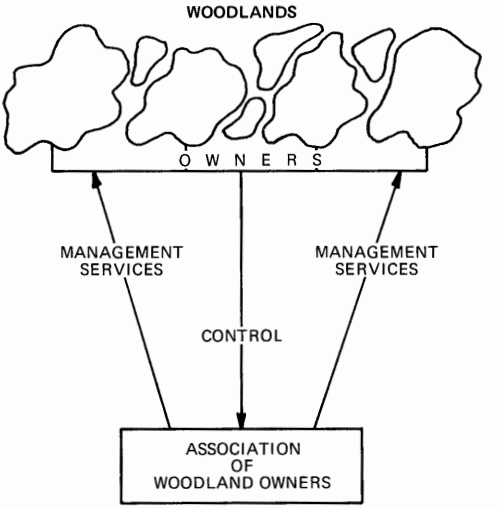

Figure 2.—Diagram of a limited management cooperative. Woodland owners combine their resources, support and control their association, and in return receive management services at a lower cost than they could as individuals.

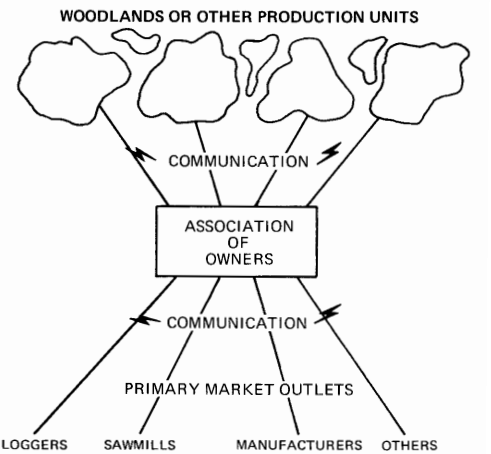

Figure 3.—Diagram of a limited marketing cooperative. This provides a line of communication between sellers and buyers on a fee basis. Woodland owners form an association to provide information on market conditions: to members about markets; to buyers about supplies available.

selling timber. When considering what management services are needed, you should make a thorough analysis of what services are already available through state and private forestry programs and consulting foresters.

Marketing cooperative.—Services in this type of cooperative

can range from simply providing a line of communication between buyers and sellers to determining cutting practices, marking, harvesting, concentrating and storing, standardizing and grading, selling and transporting, collecting payments, and dispersing returns (fig. 3 and fig. 4).

Management-marketing cooperative.—If both management and marketing services are needed, the specific type and combination of activities and the proportion of investment devoted to each segment should be considered, and their comparable values should be analyzed and tentatively determined (fig. 5).

Custom processing cooperative.—Processing activities such as sawmilling, yard-seasoning, kiln-drying, planing, or more refined processing can be performed for members, local users, or larger

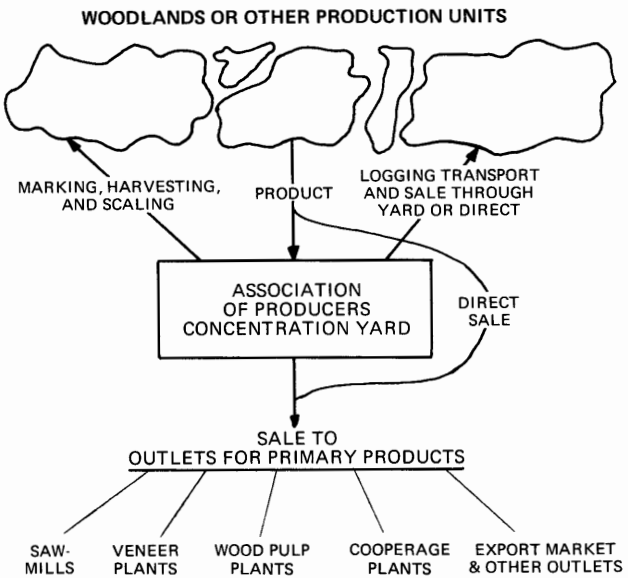

Figure 4.—Diagram of an integrated marketing cooperative. This provides all activities under contract from marking timber to collecting payments from buyers and making repayments to members. Area of operation is limited by transport for an individual concentration yard and by management requirements for a federation of yards.

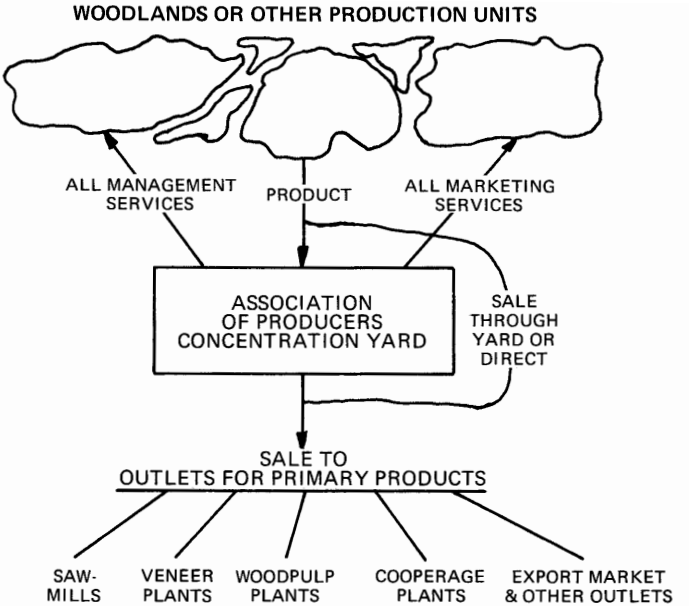

Figure 5. — Diagram of an integrated management-marketing cooperative. This provides complete woodland management, marketing, and related services to members under long-term agreement for producing and distributing primary products.

and more diversified market outlets. For example, this type of cooperative could supply the demands of a federation of agricultural cooperatives.

Processing-marketing cooperative.—This type of activity could vary from a unit providing processing and marketing activities for woodland owners to that of assembling products from several processing plants (either physically, by title, or by contract) under a central marketing agency. Such an association could provide a specialized and possibly more efficient method of sale and distribution.

Management-processing-marketing cooperative.—Various combinations of this type of organization could be developed. A typical operation would involve the integration of woodland management services with processing and marketing activities. The type and kind of services and activities to be performed, the

degree to which they are to be carried, and the resources required for each segment of the operation must be determined. Here again, comparable efficiencies of alternative systems will be of first importance in estimating the organization's overall feasibility.

Industrial complex.—An industrial complex could be a complete vertically integrated operation. It might involve timberland management and harvesting, processing, manufacturing, and selling wood products to users or retail market outlets. Management could be provided by a central unit, or each process could be maintained autonomously and be federated as a central coordinating unit.

Raw Material Supply

The timber resource, its location, availability, and proximity to markets will have the utmost importance on the types of service to be performed by a forestry cooperative.

Lack of an adequate volume of timber was a major cause for the discontinuance of several forest-product cooperatives. This was often due to an insufficient knowledge of the availability of timber, inadequate supply of the desired species and quality, and lack of a steady supply of raw products.

A suggested procedure to help avoid such operating problems is as follows:

1. Inventory the timber resources in the area under consideration by volume, species, size, quality, size of tract, ownership, and residence of owner. This information may be available from forest-survey data or can be obtained from a more concentrated resurvey (fig. 6).
2. Determine the timber-resource potential to supply various types of outlets such as the sawlog, veneer, pulpwood, plywood, tie, pole, and piling industries.
3. Estimate the growth rate and project future volumes of timber available by species, size, and quality under various management conditions. (Some examples are: no management, limited management services and sustained-yield cutting, or full management services and sustained-yield cutting by the cooperative.)

Figure 6.—Taking inventory in a woodlot. Close inventory control is important for success of a forestry cooperative.

4. Estimate the potential annual timber drain from the resource area for periods up to 50 years. A good estimate will provide important guidelines for making operational decisions and planning the cooperative's growth and development.
5. Assuming different degrees of participation by prospective members, determine the minimum combination of timber volume, species, size, and quality by size of tract and transporting distance that will allow the cooperative a reasonable degree of success.
6. Assuming that a need exists and that total participation by prospective members can be expected, determine whether present and potential timber resources will sustain either management, marketing, or processing cooperatives under differing conditions.

Membership and Participation

An adequate volume of timber within a marketing circle will be of little value to a proposed cooperative unless the cooperative can enlist enough members who will participate actively in its activities. Lack of members, diminishing interest, and not

enough active participation were the major causes of failure for some forestry cooperatives.

Consider fully the potential membership for the three main types of cooperatives: (1) *Landowner cooperatives.*—Members may include owners or operators of all privately owned woodland tracts. In addition, municipal tracts as well as timber tracts owned, leased, or administered by trusts, holding companies, and wood-using industries are potential members of this type of cooperative and should not be overlooked. (2) *Primary product producers' cooperatives.* — Members may include landowners, loggers, sawlog dealers, and producers of pulpwood, Christmas trees, maple syrup, and other primary products or byproducts. (3) *Secondary product producers' cooperatives.*—Members may include sawmill operators, planing mills, pallet manufacturers, and other manufacturers of secondary wood products.

Founders of a new forestry cooperative should be careful not to overestimate how many members they can enlist, or how much participation they can expect from their members. The history of forestry cooperatives reveals a serious misconception about the motivations, attitudes, desires, and needs of possible members. Too often the expectations of membership and active participation have been overestimated, and the cooperatives that did this never accomplished their goals.

What's in it for me? will be the first question from prospective members. Benefits of increased prices or reduced costs will be the dominant factors affecting an individual's decision about whether or not to participate. The cooperative's capability to increase the potential member's net income will, within limits, determine his initial interest and will influence his subsequent participation. Yet in every area some landowners and operators will not participate because: (1) they do not wish to relinquish any control over their property; (2) they may not wish to disturb their woodlands for aesthetic, sentimental, or philosophical reasons; or (3) they may not be legally free to sell the forest products from their land because of indefinite authority, encumbered title, lease, agreements, and other legal or administrative reasons.

It is necessary to determine what can be expected from members in terms of: (1) accepting and carrying out recommendations of the cooperative; (2) accepting and honoring long-term contracts; (3) renewing contracts — especially short-term contracts; (4) honoring management and marketing agreements; (5) pledging land as collateral for borrowing capital for the cooperative; (6) performing harvesting and logging activities; (7) making substantial investments in the cooperative; (8) supplying timber on a scheduled or continuous basis; and (9) actively particpating in the cooperative's business affairs. Unfavorable response from the membership to these factors was especially troublesome to many past forestry cooperatives.

Past experience has shown that, in addition to an objective presentation of the facts, more scientific techniques are required to obtain realistic estimates of participation in a proposed cooperative venture for the years ahead. For this, the knowledge and experience of universities and other research institutions whose personnel are likely to maintain impersonal and objective attitudes should be utilized. Many schools, including the land-grant colleges, have developed and adopted reliable techniques for determining interest and projecting participation in various types of agricultural programs.

Most important of all for keeping members interested and participating is good communication between the cooperative and its members. Members must be kept informed about what the cooperative is doing.

Except for Christmas trees, maple syrup, naval stores, and a few other products, most forest tracts are not cropped annually. There may be a 5- to 20-year interval between the harvests of pulpwood and sawlogs. If management services are not performed for woodland owners, contact between the members and management will be infrequent unless steps are taken to maintain a line of communication. Many problems and misunderstandings arise from this lack of contact. To minimize this, many cooperatives maintain contact by correspondence, newsletters, personal visits, and other means such as assigning all members to a committee to keep them interested and informed.

Another factor that has to be considered is whether those having authority over the land are residents or nonresidents. If, as in the past, there is a continuous outgoing of owners, the business can probably operate with a membership comprised predominately of nonresidents. However, the association's success will depend to a large measure upon the degree of control exercised, the type of services offered and contracted for, the length of the contract period, and the cooperative's ability to communicate with the landowner.

Markets

As in any business, it is necessary for organizers of forest-land cooperatives to know as much as possible about markets for their products. Any cooperative should know at all times the exact number and type of potential outlets within shipping distance.

The importance of this knowledge is obvious when selling rough forest products. The number, type, and product diversi-

Figure 7.—Operators of a cooperative must know the markets for their products. This sawmill is making use of two markets by producing both lumber and cants.

fication of markets within shipping distance play important roles in determining whether sales should be made on a stumpage basis or through a concentration and sorting yard, and whether logging and transporting will become a necessary function of the cooperative (fig. 7).

Knowledge of the number and type of outlets for any given product will be important to the cooperative, especially if one of its objectives is to develop increased bargaining power. The bargaining power of a seller is more easily increased when selling to a number of competitive buyers rather than to a single buyer or to a very few noncompetitive outlets.

There are several other pertinent factors about market outlets that should be considered:

1. For each outlet, determine its business characteristics by type of product, size and normal volume of purchase, buying and selling policies, and other internal business factors that would affect the cooperative's activities and plan of operation.
2. Estimate the degree of competition between market outlets, especially among buyers who purchase similar timber products. This knowledge will be helpful when deciding whether sales should be made by auction, bid, or negotiation. It may be even more significant when determining the cutting program and specific sales practices to be employed.
3. Determine whether each market outlet owns or otherwise controls raw material resources that might be competitive with the cooperative's products. If they do, such a situation would be of particular significance to a cooperative's bargaining position—especially when the buyer is both large and isolated.
4. Calculate the new cooperative's benefit to the respective market outlets. If the cooperative can justify its activities on the basis of decreasing the buyer's product costs, increasing the quality of products he receives, or efficiently providing other worthwhile services, its acceptance within the market will be reasonably assured.
5. Ascertain whether the cooperative's activities will supplement, complement, or compete with the programs of the respective

market outlets. If the activities are either supplementary or complementary, the new cooperative will probably find its business associates to be much more receptive than if they were competitive.

6. Estimate the degree of receptivity and cooperation from the market, both as a marketing system and as individual businesses. The cooperative's ability to provide a useful service for the market outlets will basically determine whether the outlets will be passive, nonreceptive, or receptive.

Financing

Most forest-based cooperatives in the United States experienced serious financial problems from the very beginning. Three of the major problems encountered were: (1) lack of adequate capital during the initial stages of development; (2) inadequate financial structure to provide working capital for both an efficient current operation and for expansion; and (3) overborrowing and overcapitalization to the extent that overhead costs could not be met from sales margins. Although insufficient capital was rarely considered the most direct cause of failure, it significantly contributed to operating problems and often reduced or even prohibited growth and development. Too often, organizing groups failed to determine the true financial needs, and failed to set up a financial structure to meet these needs.

The amount of capital needed for initial investment, working capital, and growth will depend upon many factors and can be estimated only for a given circumstance. Important among these factors are the type of association to be established, physical plant requirements, activities to be performed, and planned operating methods. Minimum requirements can be estimated as follows:

A minimum-size (one-employee) management-service cooperative would need a capital investment of $12,000 to $15,000 for the first year of operation. A one-man timber-marketing cooperative would require approximately the same capital investment. And a limited management-marketing cooperative might require a minimum investment of $20,000 to $25,000 for the first year of operation.

The fixed capital investment required for an efficient sawlog processing-marketing cooperative would range from $150,000 to $250,000 for a one-shift operation. The financial requirements for an industrial complex would be difficult to project. For example, those for a proposed eastern Kentucky complex were estimated to be more than $4,000,000.[1]

Is the capital available? Organizers of cooperatives should determine whether the required capital can be obtained from members through one or more of these methods: membership fees, sale of common and preferred stock, retained earnings, borrowing on members' timber resources as collateral, or borrowing on warehouse receipts.

Perhaps a judicious combination of the above-mentioned methods of financing is advisable. The more members invest in their organization, the more likely they are to take an active interest in the operation and to support the organization with their patronage.

Most forest cooperatives have not relied on membership fees, sale of common and preferred stock, or loans secured by members' timber for their initial capitalization. Most cooperatives have kept the initial fees and capital investment at a minimum in order to attract as many members as possible. To some degree, this practice caused a multitude of later operational problems. Primarily because of insufficient working capital during the early stages of operation, most cooperatives had difficulty providing enough services to maintain member interest and participation and to stimulate additional investment.

Except for one stock corporation that charges only a $10 membership fee, the more recently organized forest cooperatives —especially those marketing annual crops—have required substantial investments of their members. In general, they obtained a large part of their capital by selling both common and preferred stock to members in proportion to their gross volume of business before joining the cooperative.

For example, three recently organized marketing cooperatives

[1] U. S. Department of Commerce. A FOREST INDUSTRY PROCESSING AND MARKETING COMPLEX FOR EASTERN KENTUCKY. 144 pp., illus. 1963.

obtained their basic operating capital from: (1) annual assessments on the member's total gross sales, including both the sale of products made through the cooperative and those made to all other buyers; and (2) by charging a small commission for products sold annually through the cooperative. This means that members who sold products through the cooperative were assessed twice for the same product. The reason is that the type of services provided by the cooperative such as advertising, quality control, grading rules, and promotion, was helpful to all member-producers regardless of whether or not they sold most of their products through the cooperative. The commission charged on sales through the cooperative was designed to equalize the cooperative's cost of service in proportion to benefit received. Patrons received an extra service and therefore should pay more.

Another question that often arises is whether nonvoting stock or certificates of investment should be sold to nonmembers. Members may not be able to meet the investment required for total capitalization. So other sources of funds must be considered.

One method of fund-raising often used is the sale of limited-interest, nonvoting, preferred stock to individuals outside the cooperative membership. This practice incurs no particular disadvantages if preferred stock sales are based on low rates of interest. However, there is a chance that such a procedure, if handled improperly, might weaken the members' interest. It might cause the member to look on the cooperative as "the other fellows' " rather than "ours".

Financing might also be obtained from other sources such as the district banks for cooperatives of the Farm Credit System, commercial banks, utilities, insurance companies, other agricultural cooperatives, timber industries, or State and Federal developmental agencies. These are potential sources of both investment and working capital.

With the possible exception of State and Federal developmental agencies, rarely can more than 50 percent of the total investment be obtained from these outside sources. Each source usually requires a detailed, businesslike management plan for

the proposed operation, on which to base a financial analysis. In most instances, collateral and mortgages will be required to reduce the lending institution's risk.

The total amount of borrowed capital and the interest rate that can be sustained by the cooperative should be evaluated thoroughly. Relatively high interest rates, combined with the narrow profit margins that are characteristic of primary forest industries, can make loan repayment difficult. Yet, when funds are readily available, precautions should be taken not to overborrow and overcapitalize to the point of hampering operations with burdensome overhead expenses.

A sound practice is to design a financial structure flexible enough to withstand periods of unexpected financial difficulties. Financial problems can arise as a result of unusually harsh, perhaps unfair, competition during periods of reduced demand, or as a result of fluctuations or a downward trend in prices received for the end product.

Labor and Management

Except during World War II, forest cooperatives have encountered few labor problems. The most significant postwar problem has been a rapid turnover of labor due to the transitory nature of the work. Several pulpwood, Christmas tree, and maple syrup cooperatives, as well as a few sawlog cooperatives, have had difficulty hiring skilled and semiskilled labor. This has been due primarily to inability of these groups to provide reasonably stable or permanent employment. This problem can be expected in future operations unless the business can provide full-time year-round employment.

The availability of needed skills should be determined. If skilled labor is unavailable, a training program may be needed to develop the types of employees the cooperative needs. The estimated cost of such a program should be determined before beginning operations.

Management is vitally important to any cooperative, since it is responsible for planning, organizing, directing, coordinating, and controlling all of the business activities. Management is also responsible for hiring key personnel to carry out these functions.

Too often management's value has not been recognized in the actual organization and operation of cooperatives.

Ultimate control of a cooperative is invested in the membership, who can elect or remove the directors. However, management becomes the responsibility of the directors and general manager. Directors limit their activities to determining business policies and usually delegate most of the administrative responsibilities to a general manager. The general manager is the active business head of all operations and is thus responsible to members and directors for administering all business affairs.

Assuming that all other business factors are conducive to a successful operation, and without minimizing the importance of active members and directors to overall management, the general manager is the key to success of a forest-based cooperative. When the general manager is the only employee of the cooperative, he must have skills in forestry, administration, and public relations, and must also be a production manager, a marketing expert, and a good salesman. And, above all, the general manager must have the confidence of the industry with which he deals.

To carry out his duties most effectively, the manager of a year-round forest cooperative should have definite administrative authority, should be employed full-time, should be paid a competitive wage, should be offered an incentive bonus, should have no conflict of interest, and should be authorized to select qualified personnel for staff positions under his supervision.

And, except for marketing highly seasonal crops such as Christmas trees or maple syrup, no attempt should be made to operate until sufficient capital is raised to employ a full-time manager.

Costs and Returns

Assuming all other conditions are favorable for establishing a new cooperative, organizers must analyze its business potential before making capital investments. The nature and type of data required will vary by activity, area, economic conditions, and complexity of analysis. However, the following examples illustrate the basic factors to consider in making this determination.

Appropriate modifications should be made to suit prevailing conditions.

For a limited management cooperative.—The duties of the cooperative are to provide forest-management services, including stand inventories with periodic check cruises; prepare simple management plans; mark timber; supervise stand improvement; supervise stumpage sales and harvesting contracts; and recommend fire prevention practices and methods to control insects and diseases. These are the basic estimates for a one-man operation:

1. Maximum land area managed: 20,000 acres.
2. Minimum tract size handled: about 50 acres or 50,000 board feet, but dependent on stand characteristics.
3. Maximum workdays available per year: 250.
4. Estimated minimum first-year cost: $12,000. This includes $8,000 for a full-time forester, $2,600 for a part-time clerk and office space, and $1,400 for travel.

The minimum average cost would be $0.60 an acre per year or $12 an acre for a 20-year management program. Costs of a one-man operation can be expected to increase because of salary increases and rising overhead costs. These can be offset partially by increasing personnel productivity and acreage handled, and by skillfully manipulating the work load.

Based on the above activities and resources, a breakdown of annual tasks might appear as follows:

Tasks	*Man-days available*	*Acres covered*
Cruising timber*	100 days	5,000
Preparing management plans**	50 days	2,000
Marking timber***	50 days	1,000
Supervising sales****	50 days	—

*Aided by aerial photos; includes drawing maps and field plots, and making reports.
**Based on 100 tracts of 200 acres each.
***Based on a 20-year cutting cycle.
****25 weeks at 2 days per week.

Figuring a cut of 1,500 board feet in sawlogs plus 4 cords of pulpwood per acre, the drain and the stumpage value from 1,000 acres would be roughly:

Drain:	Sawlogs—1,500,000 board feet.	
	Pulpwood—4,000 standard cords (128 cubic feet/cord).	
Value of cut:	Sawlog stumpage @ $20/M	$30,000
	Pulpwood stumpage @ $1/cord	4,000
	Total gross value	$34,000
		or $34 per acre.

These figures are rough estimates and for beginning years only. As growth improves, the annual sawlog cut may be doubled within 20 years. By then, the annual cut should be about 3,000 board feet per acre if annual growth has been 150 board feet per acre. This would double the gross return with less than a proportionate increase in management costs.

For a limited marketing cooperative.—The duties of the cooperative are to provide timber cruises and marking, sell stumpage, supervise harvest and initial transport, collect payments from buyers, settle members' accounts, and act as an advisor on these and other marketing problems. These are the basic estimates for a one-man operation:

1. Minimum acreage: 50,000 acres.
2. Minimum tract size handled: about 50 acres or 50,000 board feet, but dependent on stand characteristics.
3. Maximum man-days available per year: 250
4. Estimated minimum first-year cost: $12,000. This includes $8,000 for a forester-salesman, $2,600 for part-time clerk and office space, and $1,400 for travel.

An annual operations cost of $12,000 represents (1) about 14 percent of gross sales; (2) an average cost of 24 cents per acre under the program; or (3) about $4.80 for each acre marketed, based on a cut of 2,500 acres per year. How these costs are shared can be changed by changing the program's operations mix.

The marketing tasks may be divided as follows:

1. Marking timber: 125 man-days required to mark about 2,500 acres per year.
2. Selling timber and making contractual arrangements: about 20 days.
3. Supervising sales: 105 man-days, or 3 days per week for 35 weeks.

Figuring a cut of 1,500 board feet in sawlogs plus 4 cords of pulpwood per acre, the drain and stumpage value on 2,500 acres would be roughly:

Drain:	Sawlogs—3,750,000 board feet.	
	Pulpwood—10,000 cords.	
Value of cut:	Sawlog stumpage @ $20/M	$75,000
	Pulpwood stumpage @ $1/cord	10,000
	Gross value of cut	$85,000
		or $34/acre
Estimated return per acre to owner, based on:		
	Sawlog growth of 150 board feet/year @ $20/M	$3.00
	Pulpwood growth of ½ cord/year @ $1/cord	.50
	Total return	$3.50
	Less cost of sale	—.24
	Gross return	$3.26

These figures are for the beginning years. As growth improves, the annual sawlog cut may be increased.

For a limited management-marketing cooperative.—The duties of the association, assuming a two-man operation and emphasizing marketing services, are:

Under management agreement, to make stand inventories with periodic check cruises; prepare simple management plans; supervise stand improvement; and provide recommendations for production, protection, and sale.

Under marketing agreement, to negotiate with prospective buyers on prices and other terms of sale for timber produced under management agreement. Proceeds of sale are handled by the cooperative. After deducting commission, cooperative remits payment to member.

These are the basic estimates for a two-man operation:

1. Minimum forest-land area in program: 70,000 acres; all under marketing agreement and 20,000 acres under management agreement.
2. Maximum workdays available per year: 500 (250 professional and 250 technical).
3. Estimated minimum first-year cost: $20,000. This includes: $10,000 for a forester-salesman, $5,000 for an apprentice

forester, $2,600 for a part-time clerk and office, and $2,400 for travel.

The cost of operations can be allocated in this manner: (1) about 36 cents per year for each acre under management agreement, based on a 20,000-acre program; and (2) about $3.66 per acre harvested, based on a cut from 3,500 acres per year. The latter figure represents about 10.8 percent of gross sales. The cost calculations from which these figures were obtained are as follows:

1. Rough estimate to be charged for management: 150 workdays used per 20,000 acres per year @ $12,000 for 250 workdays = 3/5 of $12,000 or $7,200; $7,200 divided by 20,000 acres = $0.36/acre/year.
2. Rough estimate charged for marketing services: $20,000 total cost minus $7,200 management cost = $12,800 charged to marketing; $12,800 divided by 3,500 acres = $3.66 per acre harvested; or $12,800 divided by $119,000 gross receipts = 10.8 percent.

The management and marketing activities can be broken down as follows:

Tasks	*Man-days available*	*Acres covered*
Cruising timber*	100	5,000
Preparing management plans**	50	2,000
Marking timber***	175	3,500
Selling timber and arranging contracts	30	—
Supervising sales****	145	—

*Aided by aerial photos; includes drawing maps and field plots, and making reports.
**Based on 100 tracts of 200 acres each.
***Based on a 20-year cutting cycle.
****48 weeks at 3 days per week.

Figuring a cut of 1,500 board feet in sawlogs plus 4 cords of pulpwood per acre from 3,500 acres of timberland, the drain and stumpage could be roughly:

Drain:	Sawlogs—5,250,000 board feet.	
	Pulpwood—14,000 standard cords.	
Value of cut:	Sawlog stumpage @ $20/M	$105,000
	Pulpwood stumpage @ $1/cord	14,000
		$119,000

These figures are for the beginning years only. If future annual growth averages 150 board feet per acre, the annual sawlog cut may be doubled within 20 years.

For a limited processing-marketing cooperative.—Many structural and operational variations are possible for this type of organization. Also, considerable data describing these variations are available. Thus, this discussion is limited to suggesting some minimum (rule of thumb) requirements for Appalachian hardwood producing units:

1. Output: 3 to 5 million board feet per year.
2. Acreage harvested: 2,000 to 3,400 acres per year with a periodic cutting of 1,500 board feet per acre.
3. Program: Based on expected annual drain, 40,000 to 68,000 acres would be needed to support a 20-year program of cutting to supply the above mill capacity.

With an annual growth rate of 150 board feet per year, only one-half as much acreage would be needed within 20 years to supply the mill to its capacity. Or, the mill could increase its capacity at the same rate as the increase in the timber resource and double its capacity within 20 years.

ORGANIZATIONAL CONSIDERATIONS

An organization's formal and legal structure and its operating methods and policies significantly influence its performance. Structural aspects of a cooperative include such factors as determining the purpose, objectives, and scope of business operations in keeping with the character of ownership; separating activities logically and setting up distinct functional divisions; delegating formal authority and assigning specific duties and responsibilities; establishing required staff positions and committees; developing policies and procedures for major activities; and selecting qualified personnel.

The data collected and evaluated during the preorganizational stage serve as the basis for developing a cooperative's structure and operating policies. The following discussion explores some

of the more important legal factors as they apply to organizing forestry cooperatives.

Assistance Available

It may be necessary to confer with persons who have practical experience in cooperatives and forest technology before deciding what form and plan of operation to use. Assistance can be obtained from county agricultural agents, state and county foresters, consulting foresters, universities, agricultural cooperatives, and the Farmer Cooperative Service of the U.S. Department of Agriculture. Forestry cooperative advisory groups established in 26 states can also provide valuable assistance.

Legal Structure

Legal counsel should be retained to help draw up the organizational documents. Counsel should be especially knowledgeable about both Federal and State laws and regulations governing cooperatives.

Each state has one or more statutes regulating the incorporation of new business organizations. Counsel should make a careful investigation to determine the statute under which the proposed cooperative should be incorporated. A copy of these statutes can be obtained from the proper state official, usually the secretary of state or corporation commissioner.

You will want to consider with your attorney the advantages and disadvantages of operating as a profit or nonprofit enterprise in terms of your cooperative's basic objectives, tax structure, and ability to finance, as well as the expected attitudes of prospective members and business associates.

Incorporation.—Some forestry cooperatives that went out of business were voluntary, unincorporated organizations. This form of loosely knit organization has proved to be an unstable business form even for businesses not cooperatively owned and operated. A group that plans to establish a forestry cooperative should therefore give serious consideration to incorporating.

There are no appreciable disadvantages to incorporating a business. In contrast, there are several advantages. Probably the main advantage is the legal protection it gives its members. By virtue

of being incorporated, the organization gains legal entity and provides limited liability for its members. The corporation is responsible for debts and other liabilities incurred, is able to enter into contracts, and is able to obtain title to property. An incorporated firm can also be authorized to sell stock and can often borrow funds easier than the unincorporated firm. The cost of incorporation is usually negligible.

Charter and bylaws.—In drafting the legal papers, care must be taken to preserve the association's cooperative character by adopting suitable provisions in the charter, articles, and bylaws. Each state has statutes governing the incorporation of cooperatives, which require inclusion of specific information on the charter or certificate. The specific requirements vary from state to state. Also, petitioning cooperatives often include additional information in the form of articles of incorporation and bylaws as a part of the official record.

The articles pertain to the general structure of the cooperative. They usually include the name, place of business, purpose, amount and number of shares of capital stock to be issued, rules governing the transfer of stock, period of existence, number of directors and their duties, property rights of the members, and certain other provisions consistent with the laws of the state.

Bylaws of a cooperative comprise a comprehensive set of rules that regulate its day-to-day business activities. The bylaws should be composed with meticulous detail since they express exactly how the business is to be conducted, and point out the responsibilities of its members, directors, and other officers, requirements for membership, voting rights and quorums, determination and distribution of earnings, and miscellaneous provisions.

Authority delegated by members.—Regarding organization and operation, consider the degree of control a forestry cooperative should have over its members' forest land. Should legal authority be delegated to the cooperative to manage its members' woodlands; and, if so, to what degree? Should management and marketing agreements be short-term or long-term contracts or a judicious combination of both?

Most forest cooperatives in the United States were organized

with a very limited management control of timber supply rather than as associations with full contractual authority. The latter type of control is more prevalent in Europe, where landowners and other primary producers have practiced cooperative enterprise successfully for over a century.

Such contractual arrangements are not foreign to this country, however. Landowners, especially nonresidents, commonly place their holdings under the direction of trusts, banks, law firms, and similar organizations. These contracts range from short to long and often indefinite periods of time, confer varying degrees of legal authority, and cover activities ranging from simple safekeeping to continuous business-operations management.

Other landowners might also welcome a similar opportunity. By managing their lands through an association of owners, they would stand to gain monetarily and still maintain some personal control. First, they would gain the advantage of having their lands under the business direction of professional forest managers. Second, their business should be able to operate with increasing profitability as it increases in size and flexibility. And third, management control by the cooperative would permit nonresident owners to keep their property under continuous and productive management.

Indirectly, owners would get other advantages from the cooperative's improved business activities. To a cooperative performing management, processing, or marketing activities for small woodland owners, there are several obvious business advantages to the cooperative if complete control is held over the timber resource and its disposition. Activities such as woodland management, harvesting, transporting, processing, sales and distribution can be programmed in accordance with the cooperative's production and marketing objectives and commitments. Under able management, such a cooperative should be more flexible, be able to plan ahead, have fewer problems communicating with its members, avoid many of the characteristic problems and pitfalls of cooperatives that have limited short-run authority, and, in the final analysis, be more efficient.

Perhaps one of the main drawbacks to forming a cooperative

that has full management control would be the loss by members of personal day-to-day control over their woodlands. Some prospective members may oppose turning this much control over to cooperative management since it would require giving up freedom of action to manage their forests as they see fit. Consequently, except under short-run agreements, their participation could not be expected.

Working agreements.—Particular attention should be given to the membership, management, and marketing agreements to be used. Although many different types of written and verbal contracts will be required during the life span of an organization, two are fairly basic to a new cooperative: preorganizational contracts and operating agreements.

The preorganizational contract is an agreement between the cooperative and prospective members. Generally this is a written agreement in which the prospective member guarantees to actively participate or to provide a minimum volume, capital, or both, should the forestry association actually become established. Such a commitment by prospective members affords the organizers a valid basis upon which to plan, borrow, and conduct further organizational activities. If prospective members will not provide the required initial capital, expenses incidental to incorporating will not be incurred.

The second type of organizational document includes basic operating agreements such as management and marketing contracts. These may cover a wide range of activities on the part of both parties. However, they should set forth clearly the responsibilities of both the member and the cooperative in carrying out prescribed activities, and the manner in which these activities are to be financed.

Sample working agreements may be obtained from state departments of agriculture and commerce, extension services, agricultural cooperatives, and the State Forestry Cooperative Advisory Group. We suggest: (1) that sample documents be closely reviewed for their applicability, (2) that legal counsel be retained for drafting new documents, and (3) that all contracts be definitive, understandable, and reasonably airtight to assure a complete meeting of minds.

CONCLUSION

A cooperative enterprise, in itself, cannot guarantee success. A cooperative is simply another way of doing business. Like the individual proprietorship, partnership, or general corporation, owners of a cooperative must found their organization on a businesslike basis if they are to succeed.

Organizers of a forest-based cooperative can avoid or solve the more serious operational problems if, before organizing, they will: (1) adopt specific guidelines and determine the economic need for the enterprise; (2) conduct an objective study of the operations' short- and long-run business potential; and (3) develop a comprehensive plan for both its organization and operation.

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