



Cooperatives for the promotion of forestry in rural development

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One way for small-scale forest producers to gain increased economic power is through the formation of cooperative enterprises. But operating a successful forestry cooperative requires more than just a pooling of assets and a sharing of the profits; it takes dedicated leadership, trained management and clear objectives. Based on his own extensive experience in the management of forestry cooperatives in Scandinavia, the author of this article sets out some fundamental requirements for organizing and managing forestry cooperatives as they might be applied in the developing world.

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• According to the *Oxford English Dictionary*, a cooperative is "a society or union for the production or distribution of goods, in which profits are shared (frequently in the form of dividends on purchases) by all contributing members". Thus the main characteristic of a cooperative is that profits resulting from its activities are shared among all its members or participants.

Although many developing countries are rich in opportunities for forest-based enterprises, these potentials might not be utilized. The first thing to do is ask why.

Forestry cooperatives are less common than agricultural cooperatives. However, as developing countries give increasing importance to the contributions that forestry can make to rural development through people's participation in forestry and tree-growing programmes, the concept of cooperative forestry enterprises is gaining increasing attention.

Most developing countries have experience with agricultural cooperatives; many in fact have government departments dealing with the subject. However, promoting forestry cooperatives often becomes the job of the forestry department, which may have little or no experience in this type of venture.

This article draws to a great extent on experiences in forming and operating forestry cooperatives in Scandinavia, but it describes some basic principles of organizing and managing cooperative ventures which are in many respects universal. First the cooperative's characteristics as an enterprise are examined; then the means of developing objectives that will motivate people to participate are considered. The operational requirements of management, training, financing and administration are subsequently looked at, concluding

with a summary of how to evaluate the potential for establishing a forestry cooperative in a developing country.

The concept of cooperatives

A cooperative is a special case of enterprising. At the risk of oversimplifying, it is useful to review the general structure of enterprising according to today's economic theory. An "enterprise" has one or several owners, who might be either members or participants. An essential basis for the enterprise is its own assets: hardware, real property, legal rights, and capital. All assets can be measured in terms of money.

To run an enterprise usually requires many more resources than those actually owned. Additional resources may be rented, leased or obtained on contract, which means that the enterprise must come to agreements with suppliers, employees, financial institutions, etc. and somehow pay for their services. An enterprise might rent or lease properties from the state or from society, e.g. it might have to pay for the use of some infrastructure, mostly in terms of taxes or duties.

These agreements will generate costs that have to be covered by income from whatever is produced or sold. Thus price agreements with consumers (customers) are also needed.

Costs and income will be distributed over time in different ways. Something obtained today has a higher value than something for which one must wait. Thus a value must be put on time.

Another fundamental aspect of enterprising is that to ensure long-term survival, revenues must be higher than the value of resources consumed in production. In monetary terms, income must exceed costs in the long run with due consideration to "the value of time" ("interest").

It is important in the managing of an enterprise to establish a system wherein all necessary agreements on prices, wages, salaries, and so on are settled in a way that secures continuous work (production) and does not deplete the assets owned by the enterprise.

If the enterprise is a cooperative, its members will, by definition, own it. In that role they demand some sort of benefit from their membership. This might be direct or indirect or both.

The entire objective of the enterprise has to be settled and agreed upon by its owners (members). Consequently, they also have to carry the fundamental responsibility of management. In doing so, a cooperative, by definition, must follow the "one man, one vote" rule. Members (owners) will also have to decide on how to organize the executive management and settle its power of attorney. Any enterprise also needs statutes agreed upon by the owners (members) which fall within frameworks provided by laws and regulations.

In organizing a cooperative, all these factors have to be considered quite independently of social, political and other local conditions. Three steps are fundamental and universal to any cooperative enterprise. There is a need to:

- define objectives with due consideration to constraints;
- draft statutes which, in combination with the overall objectives, are likely to motivate potential members;
- identify a minimum number of key people to take responsibility and serve in executive positions, making sure that they are aware of the fundamental economic features of an enterprise.

The following sections will look at some of the problems and issues that arise when applying

these concepts to forest cooperatives in the developing world.

Developing realistic objectives

The rural population of the developing world is often not aware of the potentials and possibilities that a forest cooperative offers. Thus, information from external sources could be the key to getting things moving. This kind of information can be of great importance in the choice and evaluation of objectives and targets, the first step in establishing a cooperative project. The process has three integrated components, which are to:

- develop a technical description of possible targets;
- inform potential participants about the possible benefits to and input required from those taking part;
- conduct a search for local leaders.

These components are described more fully in the planning check-list (see Box), which can be used by planners and organizers considering the appropriateness of a particular rural area for establishing a forest cooperative.

An important consideration in developing objectives is a realistic analysis of possible constraints. Although many developing countries are rich in opportunities for forest-based enterprises, these potentials might not be utilized. The first thing to do is ask why. Answers to this question will be a guide to understanding the factors hampering development and will help planners of a forest cooperative to choose reasonable objectives.

Participants in a cooperative enterprise must find its objectives meaningful, challenging and compatible with their expectations. Wherever a venture is to be organized, plans relevant to forestry probably already exist. These might be general economic plans for the entire country, regional land-use plans or more diffuse plans existing only in people's minds.

Forestry cooperatives planning checklist

1. Determine forest potentials in the regions. *What* can be produced and when can something be harvested?
2. Describe the population and likely *future* needs that could be met by forest activities, and analyse market prospects.
3. Describe present and likely *limitations* caused by laws, social conditions or other factors.
4. Form possible objectives for a project and estimate likely *benefits* as well as *necessary inputs*. This might be done by generating alternatives according to different levels of ambition. (All should be based on the first three steps above.)
5. *Inform* people about these possibilities and search actively for *leaders* who are attracted by the cooperative approach.
6. Perform a thorough survey of people's *attitudes* to these ideas and test the strength of their *motivation*. Are the incentives sufficient? Define the constraints as perceived by local people.
7. Define to what extent external help is required in terms of training, safe loans, and other needs. Also check to see if constraints can be adjusted in order to make the project more efficient.
8. Estimate *secondary benefits* from the project to society as a whole. Would such benefits stimulate external support, possibly for infrastructural improvements?
9. Produce draft statutes and preliminary budget.

10. Call potential participants to meetings to introduce a pilot project as a proposal. These meetings should be run by leaders identified as in step 5 above.

11. If sufficient support is generated during the meetings, create the cooperative and start moving. If not, analyse why and try to reassess the realistic potential for a cooperative in the prevailing conditions.

The objectives for a forest cooperative have to be chosen in a way that does not conflict with existing plans. Furthermore, objectives must be concrete and must include an expected result of evident value to the participants. This is not always so easy. When it comes to reforestation, for example, revenues are projected many years into the future. Therefore, participants must be assured that they will have the right to harvest or somehow share future revenues. Ideally, reliable legislation would exist to guarantee such revenues. In Scandinavia, for example, laws concerning private ownership and inheritance for farmers provided a necessary basis for much of the farsighted silviculture undertaken by previous generations.

The most difficult element to analyse is local attitudes. How do the rural people feel about proposed activities? Pilot aid projects that fade out of existence often do so because of social or psychological factors that in turn cause technical problems. It is advisable to consider these questions from the very beginning.

For example, development aid projects in the planning stage tend to describe technical conditions much more carefully than they do in the "psychological climate". Much effort is put into land and forest surveys or into the design of methods and machinery. Inadequate attention may be paid to the description of social, political and other conditions that in fact are of great importance. Furthermore, political or even religious barriers that curtail activities are often encountered.

The entire idea underlying the cooperative approach is that those participating must become motivated in order to guarantee the future of the project. The crucial factor in providing such motivation is whether or not people in rural areas are aware of existing possibilities, and that these correspond to their perceived needs. If not, no real demand exists for the commodities that might be produced. Forestry and forest industry can satisfy many evident and immediate needs in most rural areas of the developing world. Fuelwood and building materials for local use, for example, are often essential goods. Local "export", to nearby areas in exchange for other commodities might also be an efficient part of a development policy. However, this calls for a market mechanism, sometimes difficult to establish. All of these are important considerations, as well as being possible constraints, for planners.

The fact that the objectives for a project are logical and meaningful to an outside observer does not necessarily mean that the participants will find in them enough challenge to keep a project running. Forestry is a long-term activity, and expected revenues from, for example, growing trees will not materialize for several years. Forestry professionals tend to underestimate people's hesitations when facing a long wait.

The developing world has a great variety of social, political and economic conditions. People's attitudes and expectations, and the extent to which they are aware of forestry's potential, can vary even within a country. Therefore, it is of utmost importance to determine if objectives for a proposed cooperative can get enough active support. Some regions might show more "enterprising spirit" than those in neighbouring areas. It takes a great amount of sensitivity to identify these different attitudes and to interpret them.

A key to the successful implementation of a cooperative project is a thorough analysis of motivations and incentives. This should be developed on the basis of draft objectives for the venture and an initial description of social and economic conditions. The analysis should also do some groundwork for organizing activities to come.

Organizing and management

The main asset of a forest cooperative is its members, i.e. the people who participate. Rural areas of the developing world show a wide range of people with greatly varying attitudes and levels of knowledge.

The member/participant can be an individual or sometimes a family. He or she (or they) should be linked to the cooperative in a simple but efficient way. The membership should include both obligations and an access to benefits. Obligations might consist of a certain amount of work, perhaps at a given wage. In rare cases a small sum of money might be part of the input. The members might even contribute to a cooperative by delivering either seedlings or else the wood they cut themselves. The main benefit would normally be access to what the cooperative is producing. If members receive payment for their contributions, however, they will then be expected to pay for wood products, fuelwood or whatever is produced in the cooperative. In some cases the exchange might be done through barter. An indirect benefit might be access to facilities and activities built and/or run by the cooperative, such as schools, entertainment, and hospital care.

The nature of the relationship between a member and a cooperative is very much related to the member's level of knowledge and general living standard. This has to be determined on a case-by-case basis in cooperation with the leaders, who probably know fairly well what is reasonable. For example, traditional practices in agriculture might influence the choice of policies in a forest cooperative. Sometimes this could mean curtailing certain plans, but often it reveals bright possibilities. There are also many regions in the developing world where tribal traditions support the cooperative approach.

[TEACHING CHAIN-SAW MAINTENANCE training for cooperative members is essential](#)

In many cases an efficient cooperative may begin to take part in negotiations on these matters on behalf of its members. Although large outside industries are generally very strong, a well-organized cooperative can exert considerable power.

The representatives' group

The cooperative is not likely to operate efficiently unless a relatively small group of representatives devotes quite a lot of time and effort to the venture. This group must receive adequate training, it must be aware of the fundamental economics of enterprising, and it must be well acquainted with operations of cooperatives. Members have to delegate responsibility to this group to organize some supervision and management. Possibly working with external advice, the representative group should be responsible for transferring information to the members and must continuously incorporate their reactions and ideas.

Out of such a group some people will emerge as real leaders. They will be the key to success; without them failure is likely. Consequently the search for and training of leaders is of utmost importance to anyone trying to catalyse cooperative projects.

Financing

Any viable enterprise must have some assets of its own, and the first step in financing is to develop them. In a cooperative, individual members are seldom able to raise money for their contributions. The most efficient way to cope with this is to accumulate each member's share through deductions on payments for deliveries or work performed. In Sweden, for example, members leave a certain percentage of the payment for their wood deliveries to be added to the cooperative's own capital. Deductions proceed over a long period of time and are limited

according to the size of the member's forest holding.

Similar systems can be used in the developing countries, if members contribute their own work, part of their wages could be accumulated to help form their individual share of the cooperative's required capital, i.e. the equity.

By definition a cooperative starts with a low financial base. The speed at which necessary capital can be collected may vary. If the cooperative activities provide a spin-off in terms of benefits to society, financial support from the state is logical. However, external sources are not recommended for the basic equity capital. The cooperative should be entirely owned by its members to guarantee their involvement and ensure that they maintain full control.

In order to begin actual operations, however, much more capital will be required than can possibly be raised from the members. That capital has to be borrowed and sooner or later paid back. Here is an opportunity for the state or development assistance organizations or rural banking institutions to offer loans with "soft" conditions, such as grace periods and low interest rates. External sources might also share the risks by accepting safe guarantees. If cooperatives have to buy, say, machinery, favourable payment conditions will help to purchase it. For products to be delivered out of the forests or some sort of mill, advance payments will offer a similar support. Financing sources usually ask for guarantees, which might be given in the form of support from development aid.

One possible scenario

The basic conditions for forestry and for possible use of a cooperative approach differ among developing countries. Therefore an analysis of this concept has to be rather general and somewhat theoretical. Anything specific in what follows in this "scenario" is merely an example.

Let us assume that a country has some indigenous tropical forests covering parts of a rural area. Shifting cultivation has been practised, but there are trends toward more continuous and stable agricultural activities. Some of the crops are sold to urban areas within reach. Infrastructure is minor, but there are some roads, schools for most of the children, some contractors who undertake transport, etc. In the country's urban areas some sawmills have the capacity to increase production if wood is available. Let us also assume that local inhabitants have access to the forest and that the government is willing to issue free of charge a logging licence to a cooperative in order to promote further development.

From the outside, professional point of view, it seems logical to harvest some of the hardwood and replant adjacent farm pastureland. The ground would be excellent for both pine and eucalypts.

Phase 1

The idea of stimulating forestry development is brought up for discussion by representatives of the Forest Service. Local leaders are interested, so the Forest Service brings in a "promoting developer". He is a national of the country and has been specially trained by FAO. With his help, a core group, the precursor to some kind of association, is created. A group of 12 people in the village forms a body for further action. A contract is established with a sawmill some 100 km away. A draft agreement on the delivery of logs is negotiated. Credit is secured from a development bank.

A contractor who already has two lorries is talked into a purchase of a tractor for logging. The Forest Service provides some training to the inhabitants on felling and on how to start a tree nursery. This is integrated into the village school.

In due time the association is made a bit more formal as a cooperative. Rules are agreed upon, specifying when and how to assemble for important decisions, etc. A minimum of bookkeeping is organized.

The cooperative employs its members for cutting operations and for the establishment of a nursery. Five percent of the agreed upon wage is deducted and kept in the cooperative as individual shares, as "equity".

After some time the cooperative employs a supervisor/manager, who reports to the group of 12 members having overall responsibility.

Administration is kept to a minimum and income from log deliveries is slated to cover costs for wages, hauling and transport as well as for the nursery and the plantation work to come.

Phase 2

After some years, money has accumulated in the cooperative. The share capital has grown slightly and, beyond this, there are now operational surpluses. As prospects are good, a development bank is willing to provide a loan for the erection of a very simple sawmill to pre-saw logs into squares to make transport more efficient. The additional costs for this are well covered by increased prices and by cheaper transport per unit of merchantable wood.

Members agree to a policy to create as much employment and income as possible from each cubic metre of hardwood, and to undertake afforestation of the "village forest".

The result is a better utilization of waste from hardwoods inasmuch as some materials will be used in joinery. Consequently the mill is slowly expanded. Agriculture is adjusted to more sustained methods and, as a result, no new forest land is converted to agricultural crops.

Phase 3

The man-made pine/eucalypt forest is thinned and yields its first harvest, producing wood for fencing, some poles and fuelwood. The mill is now producing lumber. Wood waste and some bush wood are processed in a wood combustion setup, generating electric power for local use. Some of the lumber is manufactured into tool-handles. Prospects for this product are auspicious as an export agency is opened in the capital city.

By this time the cooperative is being run by professional management, now that young people who were born in the area have moved back after receiving professional training in the cities. Infrastructure has improved considerably and the cooperative is also running its own store and canteen. The assets of the cooperative have grown but the capital base is still low and quite a lot of money is borrowed. However, interests and amortizations are well covered by revenues.

The most controversial matter among members during the years has been the wage level. The leaders, however, have pushed strongly for retaining a sufficient amount of money in the cooperative enterprise to secure economic independence. To facilitate this, a definite wage has sometimes not been determined until after business results could be described at general meetings of the cooperative.

The growth of the cooperative also means that the value of individual shares is rather high. The statutes adopted forbid the members to draw their shares in cash. The shares cannot be sold outside the family, but they can be passed on to the next generation as a gift or through inheritance.

Comments

This is only a scenario, but it does indicate the potential if leaders are effective and if economy is kept under control by competent management.

No economic venture will have any kind of future unless its long-term revenues cover all its costs. Management must make sure that it balances assets and debits. One thing managers can do in this effort is to negotiate compensation from those who gain spin-off or secondary benefits from the project. Society, through the state, might be willing to give such support, preferably in terms of developing necessary infrastructure.

Training education

A cooperative is supposed to get its power "from inside", from the participation of members. The best fuel for this is adequate training and education. If incentives to participate are strong enough, the members will be willing to devote some of their time to learning how to operate the cooperative.

The nature of the training activities depends on the participants' level of knowledge and on what is produced. In a forest cooperative, activities would be related usually to afforestation or to harvesting and, in some cases, to processing and marketing. Such training is a necessary and normal part of operational costs.

A training programme should involve:

- "on-the-job training" and instructions to members;
- training for the group of representatives in technical matters;
- management training for those who take leadership, either as members or as employees.

All of these activities must be designed on a case-by-case basis.

The cooperative's leaders will probably also need additional training both in technical matters and in basic economics. There are good reasons to stress the importance of making cooperative managers well aware of the economic and financial rules under which they have to operate. Over the years the author has been in contact with many development projects and feasibility studies for proposed ventures and usually finds that technical matters are taken care of fairly well. Economic considerations, however, are often inadequate and so are the awareness of social and political constraints.

A key to successful implementation of a cooperative project is a thorough analysis of motivations and incentives.

If a cooperative project is to grow, it must be understood also in terms of its surroundings. Ideally, local or state authorities will support and not complicate the project. Financial institutions, customers, and many others will also seek information. This calls for education of some key people outside the project, in addition to the education and training of its members.

Administration

The administration of a cooperative's day-to-day activities be organized according to both internal needs and local customs. From the administrative point of view, cooperatives are unique in their voting procedure for some overall decisions: distribution of profits on equal terms and accumulation of individual shares, normally through some sort of deduction on payments.

Preferably these arrangements should be described in statutes that are agreed upon among the members. If some of the characteristics for a cooperative cannot be adapted, the enterprise would better be termed an "association". Statutes for a cooperative should cover me three points above and also state relevant objectives. It will be up to the group of representatives to express this in a way mat will win broad acceptance.

The administrative details for a forest cooperative will vary so much from one country or region to another that there is no room here to discuss them in depth. Latin American countries, India and West Africa would, for example, use very different approaches. The main point to bear in mind is mat local considerations are often as important as general principles.

Integration into other activities

To me extent possible, the introduction of forest cooperatives should take advantage of local experience. Traditionally, agriculture in a rural area might include, for example, different

patterns of cooperation. There may be existing cooperatives dealing primarily with marketing and/or joint manufacturing.

The production of food for the family creates a very strong incentive because it covers such a fundamental need. To include the growing of trees along with agricultural crops would be attractive in areas where there is an evident shortage of fuelwood or a need for fruit, fodder or building material. The planting of trees, with the prospect of harvesting them only after a long period of time, may not be so easily undertaken, however, so care must be taken to build in short-term benefits wherever possible.

Most agriculture in rural areas of developing countries is practiced through family operations. The establishment and management of forests is more of a joint venture for a village or a large group. An interesting example of the integration of forest operations and agriculture are the so-called *ejidos* of Mexico. The *ejido* serves as a special community where agriculture is practised by individuals, but the forest land - if any - is jointly managed. Out of these forests, wood is harvested for fuel, fencing, and other local uses, but also for delivery to forest industries. Some *ejidos* have even erected sawmills of their own.

A fundamental problem in rural areas is the lack of infrastructure, such as roads and communications. Improvements in infrastructure would provide benefits not only to possible forest production but also to agriculture and other activities. Ideally, rural development will be based on an overall strategy for infrastructural improvements that, in turn, will give better prospects to matters such as forestry.

Development assistance as a catalyst

It is worth recalling, even if it sounds simplistic, that there is always a logical reason if a rural area has not been developed. Anyone who has tried to initiate forestry projects realizes that real change is possible only with strong support from local people. The cooperative approach is based on such support, but it will not get under way all by itself. Furthermore, it might require political or legislative adjustments.

A worthwhile form of development aid would be to initiate and promote the birth of forest cooperatives. The very first step, however, must be to determine if such a venture is possible and, if so, whether or not it seems promising. The planning check-list (see Box) can serve as a tool for this test cycle. If a region offers possibilities, a few questions may reveal a lack of information or of an initiating impetus, and this would explain why nothing has yet been done. Traditional development projects often focus upon a theoretical plan, expert calculations, organizational charts, and so on, all seen "from above". The art of starting a cooperative must be more a kind of "missionary work" in order to awaken interest and create incentives. Initially the external contribution should deal only with the possible objectives and with the search for local "doers" who are willing and able to mobilize the necessary local support.

The cooperative should be entirely owned by its members to guarantee their involvement and ensure that they maintain full control.

In this effort, and, even more important, during a possible initiation phase, outside experts can provide both financial and professional assistance. Financial support in the beginning should focus primarily on training and education. The professional contribution can best be described as "catalytic". In chemistry, a catalyst is something that "facilitates by its presence, although it is not really taking part".

Conclusions

Intensive study of project reports, discussions with experienced project officials, and personal

experience lead the author to draw a number of conclusions on the establishment of forestry cooperatives in the developing countries, beginning with two essential observations that apply to cooperative ventures anywhere in the world. These are:

- successful cooperatives normally are created and managed by dynamic "key people". Without motivated and active leaders, ventures tend to fade out;
- before beginning to organize a venture, one must ask why it has not been done earlier. The answer to that question will be an important indication of the constraints to be dealt with.

In addition to these two "essentials", the following conclusions are offered.

First, cooperative forestry ventures have a good chance of succeeding in developing countries if properly implemented. Technical matters, with the exception of some ecological problems, are fairly simple. The economic and managerial aspects of a cooperative project, however, are difficult: they rely largely on people's behaviour, attitudes and expectations, which must be understood and accommodated before a cooperative venture can be initiated, and depend on the availability of people who have either the required management skills or the means of acquiring them.

The second conclusion is closely related to the first. It is that the cooperative approach calls for a very careful selection of where to apply it. Under conditions where a more centralized and "command from above" approach tends to fail, there might be good prospects for a cooperative. An economy is created by human beings acting in their role as workers, consumers and leaders. The more motivated they are in these roles, the more robust the economy will be. Involvement plus the expectation of benefits can be powerful personal motivators. Both are fundamental to the concept of cooperatives.

Third, it is important that the project really address the concerns of the people involved. Something that makes a lot of sense to the national economy might not necessarily interest the individual on the spot. Today's management philosophies and economic theories tend to pay more and more attention to the behaviour of individuals. Thus the concept of cooperatives is in a way fairly "modern".

Fourth, a forestry cooperative project should consider all possibilities of working together with adjacent projects. Forestry is only one component of the rural economy and seldom can operate successfully in isolation. People involved in a forestry cooperative are likely to be engaged in agriculture as well. Development of infrastructure is an essential ingredient to both successful farming and successful forestry cooperatives: costs perhaps can be shared.

Fifth, opportunities for forest products processing activities must not be overlooked. In areas under heavy development, often there are opportunities to create local industries to manufacture value-added products before the wood leaves the area. Mechanical wood manufacturing such as joinery work might well be appropriate in such areas as integrated components of a cooperative project. The more income and employment a rural area can get from a tree, the better basis there is for forest management.

