

A report prepared for the project

Lessons Learnt on Sustainable Forest Management in Africa

PRODUCERS' COOPERATIVES - A TOOL FOR DEVELOPING SMALL-SCALE FORESTRY

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Producers' Cooperatives – a tool for developing small-scale forestry

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1.0 THE SOCIO-ECONOMIC ENVIRONMENT FROM WHICH THE FOREST PRODUCERS' COOPERATIVES ORIGINATE

In the middle of the 19th century, much of southern Sweden was deforested, and there were many problems in this region caused by overpopulation in relation to the carrying capacity of the agricultural land with the technology of the time. Cattle, sheep and goats were grazing in the forests; people needed fuel wood as well as logs and poles for construction of houses and fences. Wood was used for industrial purposes like making iron and glass. There was no Forestry Act in force regulating cutting and people were not able to understand the long-term impacts on their forests by the way they were misused. The trees had no real economical value and forest land was more or less considered as wasteland. The situation in the northern part of the country was different. Vast areas were still under virgin forests and the government tried to exploit it by giving free land and tax-free favours to new settlers.

But in the second half of the 19th century things changed. The industrialisation had started in England and there was an increasing demand for wood. The exploitation of the forests in Scandinavia started in Norway and expanded into the western part of Sweden and later on northwards. New companies were founded which invested in forest land purchased from private owners for a very low price. They built big sawmills along the coast in the North and later on they continued by starting pulp and paper mills.

By the end of the 19th century and the beginning of the last century, there was also a big change in the Swedish economy. The industrialisation of other sectors had started and the economy was transformed from a barter economy to a monetary one. People moved from the countryside into cities and towns and new social groups emerged defending and developing their own interests and rights. Some of the very important national movements like the temperance movement and the Christian revivalist movements were already well established and had become important parts of the Swedish society.

The new liberal economy caused a transfer of capital to new people. A group of industrialists were very successful in their investments and Sweden got individuals and families who became very rich. On the other hand, the majority of people in the rapidly growing cities had to stay on the floor of the factories and mills as workers under poor conditions. Trade unions were formed, often with hard resistance from the employers. Many of the workers established consumers associations (cooperatives) in order not to be in the hands of the retailers, which in many places were owned by the employers.

Although there had always been a large group of tenant farmers (under the Church, nobility or the Crown), the majority of farmers in Sweden were, since hundreds of years, a free and independent group owning their land and with their own members in the Swedish Parliament. The rights of ownership to land were an important part in the political system of Sweden. By tradition, the farmers were used to mind their own business in the countryside villages. In the new industrialised society, when people moved into towns and cities, they became more dependent on selling their products and this new situation and condition had to be organised. In order to strengthen their position, they adopted the concept of the producers' cooperatives developed in England. Producers' cooperatives for milk and meat were established all over the country.

The wood industry was poorly developed in southern Sweden at the turn of last century. It mainly consisted of small local sawmills and a few small pulp mills. In northern Sweden, the situation was different. Here, the industry consisted of some very big companies, which also had purchased vast areas of forest land. The demand for wood from private forest owners was not very high and varied with fluctuations in the country's economy. That meant that purchasing wood from private farm forest owners became the buffer in the wood supply for the purchasing industries.

To sum it up, the Swedish economy was in a period of strong and fast development and at the same time the Swedish society became more complex with different interest groups, which broke down the traditional class society. Many of these new groups were characterised by special features like solidarity, idealism and nationalism.

2.0 THE FOUNDATION OF FOREST ASSOCIATIONS AND FOREST OWNERS' ASSOCIATIONS

The combination of idealism and nationalism also created a growing interest for taking care of and develop the national resources of the country. One branch of these movements had a bearing to forests and forestry. The tremendous areas of deforested land and abandoned or badly treated farmland suitable for tree planting were a

challenge for these people. Forest associations were established with the aim of disseminating knowledge about forestry. Big campaigns were launched in order to reforest and restore the mismanaged areas.

Many regional forestry associations were founded and, at the countrywide level, the Swedish Forestry Society (Skogssällskapet) was set up. The initiative to establish forestry associations often came from well-established people in the Swedish society like wood merchants and industry owners, members of parliament and forest owners from the nobility with big estates. These people were often connected to important and influential networks. In several places the initiative for establishing these associations, which were based on voluntary membership, came from the regional County Forestry Boards and the county chief forester was often chairing the Association Board. Many of the new associations were successful in their reforestation campaigns, which often were risky as the knowledge about tree species and proveniences were not very well developed in those days.

Following the setting up of the forest societies, there was also a surge in the establishment of Forest Owners Associations with the aims of improving the management of the members' own forests by giving advice and information not only on silvicultural management but also on other matters like economy, wood prices and providing help with selling the wood. The first two Forest Owners' Associations were established 1913 and 1915. During the 1920s, there were more of them and by the end of the 1930s there were more than 30 forest owners' associations established. But the resources and the capacity of these associations were very limited since the only source of financing was member fees. The interest from the forest owners for developing their forests resources was initially also poor as the wood prices were low. The industrial wood buyers had established networks where they discussed wood prices and had some control over the price development.

3.0 THE FIRST FOREST PRODUCERS' COOPERATIVES ARE ESTABLISHED

There were in the forest owners' associations some strong personalities and leaders who wanted to develop the associations in the same direction as the agricultural producers' cooperatives. They saw the advantage of cooperating in the trade of wood as this had proved to be a powerful means in the farming sector for achieving fairer prices and delivery conditions. Another objective was to get money for financing and developing the associations. Quite often these people belonged to a group of forest owners who owned big estates like the nobility. They cared for the economic value and sustainability of their own estates and believed they could strengthen their position by cooperating in producers' cooperatives. But it was not obvious for all members that the owners' associations should be transformed into producers' cooperatives. Wood trading could be very risky and in the beginning the wood buyers did everything to hamper the development of the cooperatives. They formed purchasing cartels in order to keep wood prices at a low level.

When the associations changed to producers' cooperatives the statues had to change. The article in the statues that defined the objectives of the associations normally included the following:

- to promote the forest management and the economic development of the members' forests,
- to trade the members' wood and process wood delivered by the members,
- to supply the members with commodities necessary for operating the forests.

The business activities in the producers' cooperatives started on a very small scale. There was often a lack of general knowledge and management competence including financial matters. Many mistakes were done due to the fact that cooperatives could not afford to employ more qualified personnel. It happened that the financial management was entrusted to some local accountant and that some of the board members had to run the daily operations. But when the cooperatives gained confidence among the forest owners and the number of members increased it became necessary to employ skilled managers and, later on, other staff like qualified accountants and trained professional foresters.

3.1 Some characteristics of forest producers' cooperatives

The of producers' cooperatives concept was developed in England when some weavers found that they couldn't sell their products at fair prices as they were hampered by cartels. The concept was later on adopted by farmers in Denmark and Sweden in order to strengthen the farmers' trade, but also in order to save money by cooperating in transporting and processing of the products. As many farmers also were forest owners, it was quite logical that some of them further on wanted to adopt the same concept into the forestry sector.

There are certain features that characterise producers' cooperatives, some of which are compulsory according to the international standards that have been developed for consumers' as well as producers' cooperatives. This means that a producers' cooperative differs in some very essential ways from, say, a limited responsibility company.

The major principles of forest producers' cooperatives are the following:

- 1. Membership is voluntary and open for all forest owners independent of gender and ethnical, political, social or religious affiliation.
- 2. A producers' cooperative is built on democratic principles. A member has only one vote in the democratic process independent of how big his forest area is or how much wood he is selling to the cooperative. This can be compared to a joint-stock company where you vote according to your number of shares.
- 3. Equal price for equal product or service. This means that a forest cooperative buys the wood according to a price list, which is the same for all members. The prices can vary depending on quality and also quantity. The price is normally set for wood delivered at roadside, i.e. irrespective of transport distance but there can also be prices for wood delivered at the mill site where the distance to the mill affects the price.
- 4. The members' contribution to the capitalisation of the cooperative is based on how much he delivers to the cooperative and how much forest land he owns. The payment of this contribution is done when the member delivers wood where the association keep some few percentages of the payment on a certain individual account. The money is still the forest owner's but used by the cooperative and accounted for as "share capital". The money is paid back to the member when the membership terminates according to certain rules. The "share capital" for a member is also limited up to a certain amount depending on the size of the forest area he owns. There is also a limit on how much the member has to pay the year he delivers any product.
- 5. The profit of the cooperative is distributed (shared) according to how much the member has delivered to the enterprise or used the enterprise service in a year. This can be compared to a joint-stock company where the profit is distributed according to how many shares you have.

Democratic procedures and transparent accounts have always been important features of the forest producers' cooperatives in Sweden. The members of a forest cooperative or, if it is a very big one, elected representatives are called to a General Assembly every year where questions of common interest are discussed. The General Assembly also elects a board, which is given the authority and responsibility to manage the cooperative. The General Assembly also elects independent auditors with the task to scrutinise the management and the accounts. The General Assembly has to approve the yearly audited financial statement and decide on the discharge of liability for the board's management. They are also deciding how the economic result shall be distributed.

There are also some other rules but these are the most important ones and show the principal differences to those of a joint-stock company. The rules have been slightly changed and elaborated over time but in principle they are the same. It should also be mentioned that in Sweden there is special legislation for this kind of economic associations.

It is important to keep in mind that the adoption of these cooperative rules and the development of the Forest Producers' Cooperatives must be seen in the light of what happened in other parts of the Swedish society at that time. There was a profound feeling of common goals and there was also a degree of solidarity between workers and farmers in order to uphold their rights against other strong groups in the market and to have an influence on the development of the society.

The adoption of the cooperative rules is not always easy to accept for individualists and it needs a strong sense loyalty to common goals. As the membership is voluntary and many wanted to feel free to sell wherever they wanted, there were many forest owners who did not join. In the long run, most farmers and forest owners found it useful to cooperate in such groups and they could both save and earn money in this way and many of the private forest owners in Sweden joined forest producers' cooperatives.

4.0 THE FOUNDATION OF A FEDERATION OF FOREST OWNERS

Many of the associations had learnt their lessons in a hard way and there was a need for sharing experiences between them. Some of them developed their own networks for this purpose and some of the associations also shared managing director. A national Federation of Forest Owners was established 1932 in order to take care of questions of common interest and support the cooperatives with more qualified knowledge and competence. One of the most urgent questions the federation had to address was the measurement of wood when it was sold. Normally, it was the buyer who measured the wood and the system of measurement varied between different

regions and buyers and it could even change within the same season and often depending on the market situation. It was also hard for the seller to check the measurement. Some wood measurement associations were established in some areas but it was only the buyers who were represented on their boards. The forest workers trade union was also involved in the issue and wanted a better system for the measurement of wood as the sold volume was also the basis for payment of the workers. Already in 1925, there was an appeal from the trade union for establishing an official investigation on this matter. It took eight years before this investigation commenced and the newly established Swedish Federation of Forest Owners was represented in it. The investigation found that the buyers almost had a monopoly on the measurement procedures and proposed legislation. But more important was the establishment of neutral wood measurement associations equally owned by buyers and sellers.

The federation continued to develop its activities in maintaining the rights of the private forest owners and it was soon acknowledged as their official representative in various government, parliament or civil service bodies and committees, as well as in national and international forest organisations and committees.

5.0 THE DEVELOPMENT OF THE COUNTY BOARDS OF FORESTRY

In 1903, the Swedish Parliament approved a new forest policy that included two important parts. The first one was a new Forestry Act about compulsory reforestation after final felling. The second one was the establishment County Boards of Forestry. The objectives of these boards, one in each county and all together around 20, were to support the private forest owners by giving advice and disseminating knowledge on forestry matters and management. They should also supply forest owners with seeds and seedlings and handle matters of deciding and distributing subsidies to the owners. To a certain extent, they were working with the same tasks as the nongovernmental forest producers' cooperatives. It is quite interesting to observe that, when the bill of the act was taken in the Parliament, the objectives changed in the way that the objective of supervising the implementation of the Forestry Act became secondary to assisting forest owners with training and advice. This is something that has characterised the work and service of the County Boards up to today where training, education and giving advice to forest owners are the main tools for implementing the forestry legislation in Sweden.

The County Boards were set up in the first decade of the 20th century and very soon they had a staff consisting of almost 30 forest officers and 100 forest technicians plus 350 forest workers. This was almost doubled after another ten years. Every Board was independent and the board itself consisted of two entrusted persons appointed by the official county board and one chairman appointed by the Government. The Government stressed the importance of being locally recognised and also wanted local forest commissions to be established with the aim to increase the interest in tree planting. Some of these local commissions were successful but normally they existed only for a short time. The establishment of County Boards was successful and the reforestation area increased rapidly but not up to the level that could be considered sufficient. This situation was similar to when the forest owners' associations started. It also meant that, very soon, a debate started where many actors proposed a stronger legislation restricting the harvesting of wood and harder rules regarding reforestation. Sweden got an extended Forestry Act in 1923. The mandates of the County Boards and their staff numbers expanded. In the mid 1930s, they had employed 80 forest officers, 300 forest technicians and 1100 forest workers. They were also cooperating in an unofficial network, which was called The County Boards Advisory Committee.

It is important to be able to distinguish between the County Boards and the Forest Producers' Cooperatives. The County Boards are Governmental authorities where the forest owners do not have any influence in policymaking or any decision power, while the cooperatives are owned and governed by the producers/owners themselves.

6.0 DEVELOPMENT OF THE FOREST PRODUCERS' COOPERATIVES 1940 - 1960

Sweden was neutral during the Second World War and succeeded to staying out of the war. In spite of this, the country was affected by the war in many ways. Exports and imports were reduced and Sweden was cut off from the vital import of oil and coal for energy purposes. In order to have a sufficient supply of energy for the country, the Government established a special Energy Commission with the objective to supply the country with woodenergy from the Swedish forests. The task of the commission was not very easy. A major part of the forests in the country was owned by hundreds of thousands of small forest owners. But the forest producers' cooperatives, including the newly founded Swedish Federation of Forest Owners, became an important partner in solving the energy problem. The cooperatives were assigned to organise the cuttings from the privately owned forests. This

was a very big task that forced them to strengthen their organisation in many ways. They had to employ more people and equip their field organisations with harvesting and transporting facilities. But more importantly, it gave the cooperatives a chance to gain experiences and know-how. The competence in the organisation was upgraded and they were also able to make money in this new business, which meant that they got a stabilised economy.

When the WW II was over and Europe started to recover, new markets opened up for Swedish forest products. The producers' cooperatives had now a stronger position in the market, though they still were weak compared to the big companies. But they had learned some useful lessons. Some of the companies did not want to make business with the cooperatives because they wanted to have monopoly in the market. Sometimes they offered prices too low to accept. In this situation, the cooperatives started to export wood to Germany and Norway. As the cooperatives gained growing confidence from the forest owners this was a threat to the companies' wood supply in the long run. Eventually, they accepted that it was better to sit down with the cooperatives as equal partners around the negotiating table.

During this period, the cooperatives' engagement in their own industries was very limited. In southern Sweden, they had bought some small and old sawmills and also ran some small industries that produced charcoal.

Looking at the turn-over per year for all the Forest Producers' Cooperatives associated with the Swedish Federation of Forest Owners, the economic development increased relatively slowly. In 1944 it was around 200 mill SEK, in 1951 400 mill SEK and in 1960 600 mill SEK.

6.1 The first moves towards processing wood

Despite the hard cuttings for wood energy during the war there was a surplus of wood in Sweden, especially small sized wood. This was due to all the reforestation work that had been carried out in the first decades of the century. These forests were now in a very productive phase and the standing volume of wood increased rapidly. Another fact was that grazing in the forest had almost come to an end, and this made the forests denser. The cooperatives had difficulties in selling all the wood that members wanted to deliver so some of them bought smaller sawmills and started to process the wood in their own enterprises. They found that this could be a good business, but, more importantly, they got a better insight in the market for processed wood. That also meant that they had a better control over the price development of forest products and they could claim a better and more market oriented price for the round wood. This was an experience that could also be applied on the pulp- and paper market.

The pulp and paper mills in south Sweden were mainly owned by small family companies. The major part of the mills were old and small and the owners were not very interested in further investments, so the cooperatives got many offers to buy industries when they showed an interest in this. The Producers' cooperatives in south Sweden bought a couple of these mills and started to process pulpwood on a small scale. The mills were very small and in quite poor condition, but also here they got a better insight into the market of processed wood. Like with the start of running sawmilling businesses, mistakes were made and the cooperatives had to learn their lessons of entering into a new type of business.

A special feature of those cooperatives that started to process wood themselves was that they had business leaders who were very young and equipped with a lot of entrepreneurship. It is fascinating to read the minutes from the board meetings. The manager had proposals on many new ideas but the board members were hesitating, probably because they had more experience and were afraid of the reactions from the members.

The transformation from a more idealistic or trading related approach to enterprises covering the whole chain up to processing the wood became a very controversial matter for some of the board members and they did their best to stop it. Some were also members of boards of other companies, including wood processing ones, and were thus directly connected to interests that wanted the cooperatives to stay away industrial processing of wood – a clear conflict of interests in other words. The well-known Wallenberg family who owned many important industries in Sweden, including some smaller wood processing industries in south Sweden, tried in different ways to hamper the development of the cooperatives. There was also a conflict with the Swedish Federation of Forest Owners, which wanted to become a national umbrella organisation for all the industries. Personal conflicts between managing directors or other employees and elected representatives were another part in this complex situation. But most of the investments were successful and the confidence in the whole idea of Producers' cooperatives grew among the forest owners.

The period between the end of WW II and up to 1960 was a very important time where the future development of the cooperatives was formed. It was shown that investments in processing industries could give added value to the whole idea of cooperating and thus also to the members. The number of forest owners who wanted to join as

members increased rapidly and the ability to take care of the deliveries of wood from members to a fair price increased as well. Most of the associations were now well consolidated, had a fair competence of management and were now ready to take another step forward.

7.0 HEAVY INVESTMENTS IN FOREST INDUSTRIES 1960- 1980

The associations working in the middle and south of Sweden were looking into the future and found that there would be a very big surplus of especially small-sized wood if nothing was done. They claimed that the capacity of the pulp industry in southern Sweden must expand very soon. The already established pulp industry strongly opposed this and was of the opinion that there would not be enough wood for their industries if the sector expanded. This was a way of trying to keep wood price at a low level! But some official investigations showed clearly that the yield in the forests increased rapidly and there was a need for more industrial capacity. In the north of the country, the situation was a little bit different but a need for more investments could also be predicted there. The large wood processing industries dominated the whole market and the cooperatives had difficulties to impact the price of wood.

The cooperatives found it necessary to improve the situation and, since the companies did not show any interest in further investments, they decided to build a pulp mill. The problem they had was how to raise capital for this large investment. It was obvious that this could not be done by only one single cooperative. They had to work together. The owners of the cooperatives, i.e. the forest owners, had quite a lot of capital but it was tied up in their forest estates. The question was how to make this capital available as risk capital for the industrial developments. Eventually, this was done in a way by which the cooperatives issued so called "industrial loans", which meant that the cooperatives borrowed money from the forest owners. A big campaign was launched which involved all the cooperatives connected to the Swedish Federation of Forest Owners. The campaign was successful and a joint stock company was established together with the Swedish Federation of Forest Owners and The Swedish Federation of Farmers' Cooperatives. The objective of the new company was to build and run a pulp mill in southern Sweden.

But the obstacles were many. The private pulp and paper industries tried to stop the construction in many ways as they now had come to the same conclusion as the private forest owners regarding the growing forest resources. The volume of wood in the forests was increasing rapidly and they could also anticipate a bright future for the wood-based industry. The private forest industry therefore now had their own investment plans for south Sweden. Other problems were related to a bitter fight between the farmers' cooperative federation and the regional cooperatives in south Sweden on how to share the power in the company. Later on, they also argued about where to build the mill.

Eventually, the cooperatives in south Sweden bought all the shares in the established company and thus became the sole owner. The capital that the federations had raised was utilised for investments in wood based industries in the north of Sweden where similar campaigns now had started.

The new pulp mill in south Sweden started up in 1959. This was the beginning of a very intensive period of investments by the forest owners' cooperatives. Two more new pulp mills were built in south Sweden plus some saw mills. The cooperatives in south Sweden also found it advantageous to merge into one big cooperative, which became the sole owner of all the industries. The Cooperatives in north Sweden founded their own industry company, which purchased several old pulp mills and also invested in sawmills. In the middle of Sweden, several cooperatives amalgamated and founded their own industry company. They constructed a plywood mill, bought an old pulp and paper mill, rebuilt it and also erected a new very big sawmill in the western part of Sweden. A smaller cooperative in the very south of Sweden built a new smaller pulp mill and a new saw mill.

7.1 Own processing industries require reinforcement of the whole organisation

The totally new situation for the cooperatives described above had a big impact on how they had to be organised and managed. One new experience was that if you are running big industries you must have a continuous supply of wood in order to have them running smoothly. This had not been so important for the cooperatives earlier, when they were selling the wood to others. Forest owners were normally farmers and the agriculture part of the farm was given priority when deciding about job sequencing. Thus, it was the farming situation with respect to economy, cash flow and time to spend on different activities, which decided how much time and how much resources were allocated to the forest side. Normally, the farmers were working in the forest during wintertime and the wood was hauled to roadside in early spring. It was also the farming situation that determined how much time the owner could spend for silviculture and other treatment of the forests.

This was not satisfactory for the mill operators who required a continuous and steady flow of wood. The cooperatives also had to look at long-term aspects. They had to be sure of a sufficient wood supply in the future. This meant that the silvicultural management treatment of the forests, like reforestation, cleaning, pruning, precommercial and commercial thinning, had to be intensified. There was also a need for improving the forest road networks, etc. All these vital factors strongly indicated that the work and tasks of the cooperatives had to be reorganised and empowered. A lot of forest technicians and specialists were employed and the cooperatives were divided into regions and each region into forest districts.

The forest districts became the smallest operational part in the organisation and also in the democratic process of the cooperative. Every forest district yearly elected a forest district advisory board, which had the mandate to decide certain things of a local nature. At the same time, the board became a back-up and support organ for the forest officers who were operating in the forest districts, employed by the cooperative. Each forest district had forest workers who could help the forest owners with harvesting, silviculture, etc., and the necessary machinery was bought or contracted.

The competence of the forest technicians working in the organisation was upgraded. They should be able to help the forest owners with all the activities they carried out, by giving information and advice. Special problems concerning taxes and economic questions were directed to a central staff person. Later on, when the mechanisation of the harvesting operations was in full swing, the organisation was amended to a functional one; i.e. the forest districts were the same but the harvesting teams, headed by specialist forest technicians, worked over the whole region. Special planners made all the preparations needed for an efficient operation by the harvesting teams. In this way, very efficient and sophisticated harvesting machines were able to carry out the harvesting operation at the same cost as the big companies could do in their large scale operations. Thus, the cooperatives could compete efficiently on the market.

7.2 Education and training key issues

In the new large and reorganised cooperatives there was a need to improve the information to members so they still had the feeling that they belonged to a cooperative that cared for them. The new methods and the necessity to increase the activities in the forests created a need for starting big training programmes for the members. Large educational campaigns in different subjects started and got a very positive response from the members. Quite often, they were carried out as "study circles" in cooperation with other NGOs working with adult education. A "study circle" consists of people coming together some evenings to study a certain subject under supervision of trained people and with special designed pedagogical material. There were hundreds of such study circles going on every year and they had a great impact on the forest activities. Other popular activities, in order to inform and train the forest owners, were to arrange "forest days". All forest owners were invited to a forest owned by a member where forest technicians and workers demonstrated felling techniques, displayed efficient working tools, showed new machines and informed about the market situation and prices of different assortments. They also showed how to crosscut the tree into different assortments and qualities to gain the best economical outcome. Such a forest day could assemble more than hundred forest owners.

Another important change was related to the system of selling wood. Traditionally, most of the wood had been sold "on stump" where the tree volume was measured while the tree was still standing. This method had its problems and the result could vary depending on who carried out the mensuration operation. The quality of the wood had to be estimated and the stand should normally be harvested within a period of two years. For the buyer, anyhow, it could be advantageous to buy the trees on stumps as he could crosscut the trees as he preferred and he could have a stock of growing trees to match his sawn timber customers. The cooperatives argued strongly that the wood should be measured at roadside or at the industry by the independent wood measurement organisations. Almost all members who found this system fairer adopted it as they also could save money.

7.4 Cooperation with the competitors strengthens the forestry sector

Sawmills and pulp- and paper mills have played important roles in the Swedish economy, especially as most products are exported. More than half of the net income from the Swedish export comes from the forestry sector. The Swedish pulp- and paper industry has been successful and the sector has been open for new techniques both in the industry and in the forests. This has been an important prerequisite for a successful development of forestry in Sweden. It has to be stressed that Swedish forests are managed without any subsidises from the government and has to rely on the money it generates itself. Thus, it is only the price on wood and the costs for harvesting and silviculture that are deciding the economy.

During the period 1960-1980, most forest operations in Sweden were mechanised. New transporting techniques and 4- wheel driven and frame-steered skidders, in combination with hydraulic devices, made it possible to mechanise forest operations. But the methods developed were often adapted to large scale operations, partly due to the dominance of the big companies and the State Forest Service when R&D programmes were designed. The cooperatives decided to join the Swedish Forest Research Institute and contributed financially on an equal basis to its scientific work. They were also represented in the board of the institute. Thus, they got better information on all research activities and they also had an impact on the decisions on coming research programmes. The institute was internationally highly respected and took the lead in developing efficient harvesting systems. Thus, in spite of the fact that the cooperatives and the companies were competitors on the market they cooperated in the research-based development of Swedish forestry. There were several other national organisations where the cooperatives joined the companies and the State to the benefit of themselves but also for the whole forestry sector in Sweden.

At this time, the 1970-80s, there was a strong influence on the Swedish society by trade unions and environmental NGOs. With the social democrats in power, the trade unions had direct access to the government and, if they were not able to achieve what they wanted in negotiating with the employers, they could turn to the government to support them through legislation. Not least was this approach used when it came to increasing the unions' power in the private sectors of the economy. Many new bills aiming at giving the trade unions more power in the enterprises passed the Parliament.

The environmental organisations opposed many of the new methods and systems that were introduced in the forests during the period of mechanisation. They were clever in utilising the mass media and put pressure on politicians and policy makers. In a few years, Sweden got many new laws that had a bearing on the forestry sector. All these problems together created an urgent need for the whole private sector, be it companies or farmers and forest owners, to have a better contact with decision makers and media. These had to be informed about the conditions for, and the potentials, requirements and problems of the forestry sector. The Federation of Forest Owners became a strong lobby organisation and often lobbying was done together with the central organisation of the wood processing industries. Normally, they were able to discuss their matters together and come to a unified opinion in the wake of the attacks by unisons and environmentalists. This meant that, when they met decision makers, they could speak for the whole forestry sector of Sweden.

8.0 THE HARD RECESSION 1975 - 1980

In the 1970s, the world economy was hit by the big oil crises. Almost all countries were heavily depending on external supply of energy and when the oil prices rapidly rose to unexpected levels the world economy went into a deep recession. The stocks of different commodities increased and became a heavy burden for the enterprises. The prices fell when companies were forced to sell out due to liquidity problems. Interest rates increased sharply and at the same time the Swedish production costs had increased due to overestimating the space for increasing the salaries. The situation became almost impossible to handle, and especially the forestry sector was hit as they were heavily depending on exporting their products. Even companies that had been considered well consolidated got problems and the Swedish government had to intervene in some way. Special credits were given for financing the big stocks of products and subsidised loans were given to enterprises, on the verge of going bankrupt.

The Forest Producers' Cooperatives, with their heavy investment period just behind them, were not very well consolidated and became very vulnerable in this situation. Especially those cooperatives that had invested in pulp and paper mills got into economic problems. Two of them came into a critical situation quite soon but succeeded in getting support from the government, which bought their pulp and paper industries. A third big cooperative came into the same situation later on, but, at that time, Sweden had got a new government with another policy in this respect. They found it impossible to support the industries with more money and the cooperative went bankrupt. The same had happened with another smaller one earlier but due to other reasons.

9.0 THE COOPERATIVES ARE RECONSTRUCTED 1980 - 1990

All this created a great upheaval in the forestry sector and a new structure of forest enterprises came into view. In the areas where the bankrupt cooperatives had been working, new smaller cooperatives were formed with assistance from the federation. These new cooperatives turned back to the original business concept of a forest producers' cooperative and dealt only with trading of wood. When the recession was over, there was once again a big demand for wood and the new cooperatives were successful in their activities and became well

consolidated in a few years. The cooperative of "Södra", which had been forced to sell their three efficient pulp mills to the government, had a clause in the contract making it possible for them to buy them back if it wanted. There was a hard internal fight in Södra about this, which eventually ended up in a decision to buy back the industries. The market situation was very favourable at the time this was done and Södra needed only three years pay the purchase sum.

The organisational structure of the forest producers' cooperatives was a very important asset during this period of reconstruction. The whole network of contacts with representatives of forest owners based on forest districts, as well as the whole operational field organisation, made it possible to discuss with, and inform, members on important issues. The period was also characterised by continued pressure from other interest groups in the society, some of whom openly questioned the right of private ownership of land and forests, a matter that obviously had to be discussed among the forest owners. Many new laws and regulations with bearing on forestry were introduced. There was a strong need for consultation and for training and education in order to adapt to new requirements. The cooperatives' field organisations became powerful tools in these matters. The Swedish Federation of Forest Owners played a key role in this development by initiating and coordinating these activities. At the same time, these activities made it possible for the federation to formulate firm and reliable positions in the discussions with other interest groups and in its lobbing activities.

10.0 THE COUNTY FORESTRY BOARDS CONTINUE TO DEVELOP

In 1948, Sweden got another new Forestry Act and, at the same time, a National Forestry Board was founded. This board was in charge of implementing and supervising the new act with the help of the County Forestry Boards. These boards still had an autonomous position and were acting as independent authorities. Their position was strengthened but the main activities were still the same, i.e. supporting the forest owners with advice and training and disseminating subsidises. Forest policy activities were intensified in the 1970s and Sweden got still another new Forestry Act in 1979. This act was very regulating and emphasised high production in the forests. The Forestry County Boards were strengthened and a lot of new people were employed. The main tasks for the boards were still the same but, as environment issues were highlighted in the public debate, there was successively a shift from working with forest production to maintain biodiversity in the forests. The forestry act quite soon became almost obsolete and Sweden got another new act in 1994. The boards had to deal with many new tasks in their training of forest owners and launched big educational campaigns like "A richer forest" and "A Greener Forest". These campaigns have been very successful and in many regions they were carried out in cooperation with the Forest Producers' cooperatives.

Due to budget restrictions, the County Forestry Boards now have had to reduce their staff and money allocated for advice and training of forest owners is restricted.

11.0 THE SITUATION TODAY

The wood buying companies have also been restructured during the last decades. Some of them went out from the recession in good shape due to better consolidation or better products. The market for pulp and paper became more diversified and demanded more sophisticated and specified qualities. It was important for the forest industry to meet this challenge and concentrating on special products was one way. For some of them, it was favourable to buy other companies and then sell units, which did not fit into the new concepts. This has led to a situation today where Sweden has only a few but very large forest companies. Some of them are owned by multinational enterprises. There are still a few smaller ones working with niche products.

During the last two decades, most of the Forest Producers' cooperatives have been successful in consolidating their economies, though there are still some failures. The restructuring of the companies soon required the cooperatives to follow the pattern and merge with each other. Today Sweden has two very big Forest Producers' cooperatives, one in the south and one in mid Sweden. In the north three smaller ones operate. All of them own saw mills, one together with the government owned Sveaskog. Only Södra is operating pulp mills and has specialised its production to a very competitive level - they are today a world leader in pulp making.

Altogether, the five cooperatives have 89,000 members, who own 6.2 mill ha of forests, which means that around half the privately owned forest area in Sweden is connected to cooperatives. The volume of wood annually handled by the cooperatives varies around 22 mill m3. The pulp mills produce around 1.5 mill ton and the sawmills 1.8 mill m³.

The organisational structure of a cooperative is still the same, though there has been a concentration and specialisation of some functions. Both the regions and the forestry districts are bigger and there are specialist functions even in the forestry districts. However, the principle of having one particular person who is the contact person between the forest owner and the cooperative is important and has been made a rule. That person is also responsible for all activities the cooperative is doing in the member's forest though there are other people who are carrying out the physical job.

The market situation for roundwood varies in Sweden. In south Sweden, where Södra is operating three very efficient pulp mills, the pulp wood prices are higher compared to the prices existing in the middle and north of Sweden. This is a good example of how a cooperative is using its industries for the benefit of its owners, the forest owners who are members in the cooperative. These pulp mills are very profitable and the profit is disseminated in different ways. One is that Södra pays a higher price for the pulpwood compared to what industries in other parts of Sweden do. Probably there is not too much difference in the profitability but the wood buying industries have to share the profit to the shareholders. Secondly, Södra normally also has a final payment the year after the wood has been delivered when they know better how much they can afford to pay to its deliveries. Finally, they also pay an interest for the "share holder" capital members have in the cooperative.

The same pattern is true also for the other forest producers' cooperatives but they have only sawmills to rely on when maintaining the prices on the market.

During the last decade, the question of certification of forest products was highlighted in Sweden and there was a strong pressure on the forest enterprises to join Forest Stewardship Council (FSC). A forum for discussion and negotiation between environmental NGOs and the forest enterprises were opened up. The forest companies decided to join FSC, but, in the end, the forest producers' cooperatives had to step off from these discussions as the rules and regulations were not sufficiently adapted to small-scale forest owners' situations. Later on, the cooperatives joined PFEC, which is basically better designed for small-scale forestry. In the whole process of certification, the Federation of Forest Owners has played a key role in close cooperation with the producers' cooperatives. This is another good example of the necessity of cooperating and sticking together when strong actors want to impose regulations and rules, which are badly adapted to the special conditions existing for the private forest owners.

12.0 SOME CONCLUSIONS AND LESSONS LEARNT USEFUL FOR THE FUTURE

12.1 Privately owned forests can be advantageously for a country

Many have argued that forests are national resources which require a long-term perspective in investments, utilisation and management and, thus, they have to be managed by governments. Private owners cannot be trusted in this respect as they are assumed to more consider short-term aspects and forests are easy to exploit. Other arguments against privately owned forests have been that it is not possible to maintain competence and technology in small-scale forestry. High competence is needed for a sufficient wood supply to the forest industry.

The Swedish case proves that forests very well can be owned and managed in an efficient way by private forest owners. More than 50 % of the forests in Sweden are small-scale privately owned since a very long time. Around 250,000 private owners are managing their forests under similar conditions as those owned by the government and the big companies. They have been managed within the restrictions and regulations set by the forest legislation and have had to consider the same economic restrictions set by market trends and the economy in the forestry sector. Time has shown that these small-scale forests can compete very well with large-scale ones in almost all aspects, including economic ones. By cooperating internally and with other groups of owners they have managed to adopt the same knowledge and techniques. There might be a time difference in adoption due to scale but this has more been an advantage as the small-scale forestry in that way has avoided some initial mistakes that large-scale forestry has made. But small-scale forestry has also been beneficial to Swedish forestry as there is a more diversified management due to the differences in objectives that the owners apply. This means that the small-scale forests today have a more diversified management compared to other groups of owners.

It has been proved that the right of ownership is a powerful tool in the stewardship of forest land. Almost all forest owners are interested in managing their forests in a sustainable way considering long-term aspects of forestry, such as like reforestation, maintaining biodiversity, etc. But there is a continuing need to maintain knowledge and competence among forest owners. In this respect, powerful County Forestry Boards and Forest Producers' cooperatives are of vital importance.

12.2 Cooperation between forest owners gives advantages

First, it is important to point out that, in principle, there is now difference between a joint-stock company and a producers' cooperative as enterprises. They have the same need of skilled management and are using the same management tools like organisation, staffing, decision-making, reporting, control, delegation, etc. The relation between policymaking bodies and executing ones is the same though policymaking might be a little bit more complex in a cooperative.

The major difference is more related to the ownership of the enterprise as the owners of a cooperative are also raw material suppliers to the enterprise and the profit is disseminated according to the individual members' deliveries and not to their investments in the enterprise. Thus, there is more need for information to and education of the owners. They have to understand the objectives of the cooperative and the strategies it has adopted. Generally, the objectives of a producers' cooperative are also wider compared to many other enterprises as they also include the objective of giving better benefits to the owners own enterprise, the forest, and this can be done in many ways.

The major lesson we can learn from the history of the Forest Producers' cooperatives in Sweden is that cooperation strengthens the individual forest owner's position and is beneficial for developing his own enterprise, i.e. his forest. In other words, the owner can:

- 1. Better uphold his rights against other actors in the market, like wood buyers, NGOs and authorities. These actors are specialists in their own fields and are therefore normally acting from strong positions in their contacts with a forest owner. You can never expect the forest owner to have all the knowledge these experts have together. But by cooperating the owners share knowledge and experience and, more importantly, they can afford to employ their own specialists.
- 2. By collecting wood from many individuals he can offer the market more attractive volumes. The buyer can save costs for collecting wood and is therefore willing to pay a higher price.
- 3. By collecting wood together you save money for transportation and administration.
- 4. The profits of the cooperative is distributed to the members (= the forest owners) and not to shareholders.

12.3 Cooperation between competitors can also be advantageous

It is also advantageous to cooperate with competitors in matters that are of common interest. Swedish forestry has saved a lot of money by working together in research and development of new methods and systems as well as in genetics.

Another field where cooperation between competitors can be beneficial is defending and maintaining common interests in forest policy. If the forestry sector shows a unified front when sitting together with the government and the authorities it has a much stronger position compared to if, say, forest owners and forest industry have diverted opinions.

Another very interesting form of cooperation, which benefits all the actors in the wood market, is the Wood Measurement Association. The associations are owned and operated by the buyers and sellers of wood (= wood buying companies and producers' cooperatives). They have established fair and safe routines for measuring round wood, but also efficient routines for processing data in further operations. As a spin-off effect, Sweden has got a common "forestry data centre" which processes the whole flow of data like calculating wood volumes, wood values and necessary data for the administration of the wood flow to the industries.

12.4 There is a need for visionaries

Looking back in the history of the development of forest producers' cooperatives, you will find that one of the most important driving forces has been people who have had a vision for the future. Among these people, you will find both forest owners and employees in the cooperatives. In the very beginning, it must have been very difficult to foresee the great potential the privately owned forests had. The forests were normally in a bad condition, the market for wood was undeveloped and the forest owners themselves were hardly interested in investing money in forestry. The forest land was more or less considered as useless for anything else than grazing the cattle and for the supply of wood for domestic use.

We might ask what the real motivations were for these men to put such an effort into starting the cooperatives. Many of them also faced personal risks. Some of them worked for very low salaries, some were paid according to the volume they traded and some invested even their own money when they could not get sufficient loans from the banks. Probably you will find many kinds of reasons, but a strong one was surely of an idealistic nature. These people saw the depleted forests but also the potential for developing them to the benefit for the country and the owners. There could also be motivations based on creating a fairer situation for the forest owners. We have to remember that this happened at the same time as the trade unions in Sweden grew stronger and succeeded in improving the conditions for the industry workers. But, of course, there was also a feeling of challenging a tremendously big, but undeveloped, market sector where you could make your own fortune in the future.

The motivations might vary but movements like the Forest Producers' cooperatives need visionaries in order to be developed. People who dare to take risks, but, more importantly, who have visions of what can be done and how to make it.

12.5 There is a need for solidarity

To cooperate in Forest Producers' cooperative means to adopt rules which are the same for all. This gives you both advantages and disadvantages. Advantages are easy to accept and, basically, the reason for joining the cooperative, but disadvantages can sometimes be very arduous, especially when they involve your own money. A typical example is when competitors in the wood market offer better prices than the cooperative does, which happens many times. The actors in the market sometimes have a situation where they are more or less forced to buy at a higher price in order to get necessary quantities for their industries. In such a situation, it can be very hard for members in a cooperative to sell to their own enterprise, which offers a lower price. Without a feeling for what is best in the long run, and a sense of solidarity to their fellow members, the situation can be difficult for a cooperative to handle.

In the very beginning, when the Forest Producers' cooperatives were established, it was possible to impose special rules making it compulsory for members to deliver their products to the cooperative. Later on, this kind of rules were eased and further on dissolved and today they do not exist. The cooperatives are working in a totally free market and have to compete with others on the same conditions. Membership is based on the forest owners' free will and a member is free to sell to anyone he wants. This emphasises the importance of a Forest Producers' cooperative to maintain the power of the own enterprise. It also stresses the importance of a Forest Producers' cooperative to communicate with the members. They have to be well informed about what is going on in the enterprise but also generally in the forestry sector. Normally, producers' cooperatives invest much more in informing their owners than what is done to share-holders in joint-stock companies.

12.6 Training and education are key issues when developing a sector.

Knowledge is a key issue in all development and the conclusions above support this. Ignorance of the forests and lack of basic knowledge about forestry were the main reasons why the forests got so depleted a hundred and more years ago. The forest associations realised this and their main objective was to disseminate knowledge to forest owners. The same was valid for the producers' cooperatives when they took on a greater responsibility for the development of the private forestry sector. Massive educational campaigns in different forestry subjects were launched.

But education also had a bearing on the basic principles of the producers' cooperatives. These are founded on profound democratic principles. In order to understand these rules and implement them, you must be able to read and write. But you also have to know how democracy functions in practise. All the popular national movements that started in Sweden in the latter half of the 19th century realised this and put a lot of efforts and resources in training and education of its members in this matter.

Further on, if you want to maintain a living and transparent cooperative where different opinions can be expressed and discussed, it is important that members have a good knowledge about their enterprise. The objectives of the cooperative, the management and the economy must be reported and accounted for thoroughly every year in open meetings where the members dare to express their own opinions.

12.7 There is a need for earning money

The financing of the forest associations were based on the yearly fee the members paid. It is quite clear that this fee had to be limited to a fairly small amount in order to attract members. Above this, the associations could get some grants from donators or sometime even from counties, for forest plantations. But this money was hardly enough for strengthening the forest owners' position in the wood market and maintaining their rights when forest policy was to be decided. They had to earn their own money in order to get financial resources for these important tasks. It is quite natural that they did it by acting as wood dealers with the members' wood. For some of the cooperatives this was enough and they stuck to this. But the real strong position was achieved first when they also processed part of the wood in their own profitable mills.

It is important to stress that, in the beginning, the own industries were a tool for the cooperative to achieve a better position when negotiating prices and delivery conditions with the wood purchasing industry. Gradually, this objective developed more in the direction of getting a fair part of the profits generated in the industries. Anyhow, this objective assumes that the industries are profitable, which has not always been the case.

12.8 Business is risky and needs management knowledge

The history of the Forest Producers' cooperatives is full of failures, from quite small and endurable ones to real catastrophes. Many of these can be related to lack of experience and management knowledge but also, for some of them, to poorly developed strategies. As long as the business was limited to trading wood there were good chances to master such situations. Normally, the market fluctuations were relatively small and relatively short. The problems arose when the business was connected to heavy investments in industries financed by long-term credits. The first industries were often purchased at low prices, as they were old and some of them almost obsolete. But the costs for rehabilitation was more often than not neglected or underestimated. There was also an opinion among the financial institutes that the producers' cooperatives would have quite a high solidity due to the big values that were tied to the owners' farms and forests. This made the cooperatives able to take higher risks than what would be justified in other commercial sectors. This became very obvious when the recession hit Sweden in the middle of 1970s and the cooperatives had to sell their mills and two of the cooperatives went bankrupt.

There is also reason to be critical of many of the investments made by the cooperatives. It seems that the strategies sometimes was to buy as much as possible, e.g. the cooperatives wanted to have one industry in each region just for the sake of owning a processing plant, but without considering if they fit into the segment of products they already had. This led to a situation where almost all cooperatives had a too diversified industry structure, which demanded a management capacity that the cooperatives could not afford.

After the hard backlash in the 1970s, the cooperatives, including their auditors, have learnt their lesson. The consolidation of the cooperatives is given high priority and is always under consideration. The management capacity is also given priority when employing people at high levels.