

FOREST POLICY IN SWEDEN

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HELSINKI 1954

Preface

Past and present experience learns that the forest policy of a country will in a high degree reflect the relative importance of forestry in a nation's national economy and, incidentally, also the degree of continuity and authority in the Government of the country concerned. No other field of economic activity raises higher demand on foresight and responsibility before future generations than forestry. However, this is difficult to foster in the midst of plenty. The history of forest policy therefore is very much the history of growing scarcity of wood.

From this could perhaps be concluded that forest policy would be a rather late development in a country with plentiful forest resources like Sweden. If by forest policy we mean a deliberate line of action on the part of the Government in a country to preserve and develop the forest resources in order to get the best benefit of the forests in harmony with the national economy at large, and not only for the present but also for the future, then forest policy is no late development in Sweden but can be traced several hundred years back.

We refer now to the important development in Swedish forest policy which was the outcome of the close dependency of the early Swedish iron industry upon a plentiful and sustained supply of charcoal. This led in the seventeenth century to the regulation of the iron industry in order to fit its capacity to the sustained yield of the forests. Incidentally, this regulation of an industry was wholly in accordance with the principles of the mercantile era which in Sweden dominated economic thought and Government policy from the seventeenth to the beginning of the nineteenth century. This should be useful to remember when the world has now entered upon a new area of regulations, although with a somewhat different ideological background.

Also the early sawmill industry, represented by low-capacity and primitive water-driven framesaws was kept under close supervision in the mining districts in order not to compete with the iron industry, which had first priority to the forest yield. However, also in other parts of the country

the building of sawmills was subject to Government license in order not to endanger the sustained yield of sawtimber, notably such highgrade sawtimber which at that time was considered the only worth exploiting. Even in Norrland the few small sawmills were licenced to cut a limited number of logs from specially demarked forest tracts according to a forest law of 1734. These restrictions on the sawmill industry were highly exaggerated and in the forest expanses of Norrland were, as a consequence, frequently trespassed.

The forest Law of 1903

With the advance of the liberal ideas following in the wake of the industrial revolution in England and Western Europe, the laws and regulations that had tied industry and trade, and forestry as well, gradually lessened its hold also in Sweden. A few decades of unrestricted freedom followed in the second half of the nineteenth century. As this coincided with an unprecedented growth of the forest industries to meet the rising demand for sawn woodgoods and later also for pulp and paper in Western Europe and elsewhere, the fellings in the forests were correspondingly increased. This awakened anew the traditional fears of a future shortage of wood and eventually resulted in the forest law of 1903 (enacted in 1905) with its leading principle that the owner of a forest (or whoever else who was responsible) was forced by this law to secure reforestation after felling.

This law introduced the modern epoque of forest policy in Sweden. Whilst forest policy in the earlier periods had tried to attain its goal by a system of regulations intended to keep the fellings within the limits of the sustained yield of the forests, the leading principle of the new forest policy was to attain the same end by measures intended to keep up and promote the productive capacity of the forests. This introduced a positive and active forest policy, which has since been successfully followed up and further developed. The present status of the Swedish forests is to a great extent the outcome of this new forest policy.

On the other hand, it must be observed that a forest law cannot by itself make a decided change. There must also be present the necessary conditions to make the law function. In this respect, also, a considerable change had occurred during the last decades. First, the forests had attained a stumpage value which, although still low, allowed some moderate costs to be spent on reproduction, if necessary. Further, experience had been

gathered about felling methods suited to favour natural regeneration, and also about suitable methods of sowing and planting (at least for Southern Sweden). Last, but not least, the forest law was only part of a bigger scheme which aimed to sell the idea of sustained yield and better forestry practise to the forest owners by various means — by propaganda, by education, by giving expert advice and by granting subsidies for draining marshy lands and for planting old (before 1903) cut over lands. Thus the forest law was only meant to be kept in the background and to be resorted to when other means failed. The following developments have shown that this has been the right course to follow.

Forestry boards

One important reason for the successful operation of this forest law was the far-reaching cooperation of the forest owners that was secured in the administration of the law and above all in the extensive educational work. This cooperation obtained its most apparent symbol by the arrangement that representatives of the forest owners were given two seats out of three in the County forestry boards that were organized to enact the law. This order is still observed.

These County forestry boards, as a matter of fact, have been and still are the main agency to materialize the constructive ideas contained in the new forest policy. They have gained the full confidence of the forest owners, the great mass of which accept the principle of sustained yield as the guiding principle on forestry. In order to fulfil their ever growing tasks in educating and assisting the forest owners, they have at their disposal a staff of technical men with the County forester as chief. The County forester may have one or more trained foresters as his personal assistants or else as district foresters. Further belong to the staff a varying number of rangers and helpers to them.

At the present the 25 County forestry boards employ a total of 109 trained foresters and 484 rangers, besides technical staff in lower grades and a great number of part time personnel for seasonal work as marking of trees for felling, supervision of sowing and planting, etc. As the timber companies and big private forest holdings have their own technical staff this means that the County forestry boards can devote almost the whole time of their technical staff to the assistance of the small owners, the great mass of which are farmers. The total area of the forests belonging

to these small forest owners is about 11 million hectares, corresponding to about 50 per cent of the total forest area of Sweden.

During their first period the County forestry boards had no central organization to direct and coordinate their work. This was probably, for several reasons, the best thing under the circumstances. Only a small internal body served as a means to coordinate policies and render advice.

As, however, the responsibilities of the County forestry boards as the foremost bearers of the national forest policy grew more important, it was found desirable to constitute a Central board of forestry to coordinate the activities of the County forestry boards. It has been understood, however, that the County forestry boards should continue to keep a rather high degree of independence in order to give full consideration to the varying local conditions in different parts of the country as well as to secure the continued interested cooperation of the forest owners. The Central forestry board was organized in 1941.

Later developments in forest policy

By the forest law of 1903 the sustained yield from our forests was secured so far as this would depend upon the compulsory reforestation enacted by the law. However, this would still not exclude that the forests could be cut in excess of their growth, thereby reducing the forest capital and, incidentally, also the future yield from the forests.

The apparent reduction of our forest capital that seemed to take place as exploitation continued to move into more distant forest tracts, constantly reducing the remaining stand of virgin timber, kept the old fear of a coming shortage of wood alive. One outcome of this was the idea of making a nationwide inventory of our forest resources. This led to the First National Forest Survey in 1923—29, preceded by the experimental survey of Värmland county in 1911, which demonstrated the practicability of this idea on a nationwide scale. The first National Survey was followed by a second National Survey started in 1938 and a third started in 1953. These National Forest Surveys have aroused a wide interest in forestry and forest policy and have served as a foundation in all important decisions on forest policy ever since.

Another consequence was a rather important amendment to the forest law. This amendment had its immediate cause in the increased practice during the first world war to cut immature forest stands for the imminent

need of fuelwood — the imports of coal largely failing — or else for other purposes giving quick and ready money. This meant evidently a more or less serious loss of growth reckoned in timber as well as in value from the stands thus cut. A provisional amendment to the forest law was therefore passed in 1918 prohibiting the cutting of immature or »younger» forest in other ways than by appropriate thinning. This amendment was finally incorporated in the forest law in 1923.

Aside from the great practical importance of this amendment, it brought with it another consequence of great importance for the promotion of forestry in so far as this awakened the interest in rational thinnings amongst the small forest owners. The need for guidance in this respect and, moreover, some insecurity as to whether a certain stand of timber should be considered as »younger» forest or not in the sense of the law prompted these small forest owners to turn to the County forestry boards for the marking of the stands before felling. This eventually developed into a rather common practice to have the trees to be cut marked by the Forestry boards' personnel before felling, irrespective of the age and character of the stand. This, in turn, strengthened the contacts between the small forest owners and the Forestry boards.

The last more important development in this field took place in 1948, when some further amendments were introduced into the forest law of 1923. To a certain extent these amendments aimed to give the application of certain rulings already embodied in the forest law of 1923 a more economical background. Thus it was prescribed that the reforestation duty of the forest owner laid down already in the law of 1903 should now be calculated on the basis of a certain interest rate to be decided upon by the Central forestry board (at present $2\frac{1}{2}$ per cent). Further should the »younger» forest stands now be defined as such stands which from an economical point of view were more profitable to keep rather than to cut them and realize their stumpage value. This should also in questionable cases be ascertained by a calculation applying an interest rate to be decided upon by the Central forestry board (now 3 per cent). The experience gained so far has shown, however, that it is exceedingly difficult to apply these principles in practice in a way that takes into consideration the complicated situations that arise from the fact that forestry is an integrated part of the national economy.

From the financial point of view a quite important amendment to the forest law was enacted this year, allowing the forest owner to put part of the income derived from the sale of timber into a bank account in or-

der later to have the possibility to use this money at a suitable time for reforestation and other forestry measures. This will make it easier to the forest owner to finance forestry work, as the cost of such work is exempted from tax, while the small forest owner generally does not make fellings every year and forestry work not always can be timed to be carried out in the same year as the felling is done and the income is realized. Even to the big forest owner it will now be easier to carry over some of the income in a good year to finance forestry work in a period of low tide. This is of special importance since the taxes have attained their present high level and the marked progressivity of the taxation makes the marginal tax an important item in calculating cost. Evidently this is a good solution from the community's point of view also, and must be welcomed as a positive step to promote forestry and stabilize employment in the forests.

In the future, as in the past, there seems to be three different ways to promote forestry, with special reference to the small forest owner. The first and seemingly simplest way is to proceed further on the way of law giving. The second would be to increase subsidies for measures to increase forest production. The third, lastly, is to educate the forest owners, so that they will on their own accord manage their forests in the right way, with or without the assistance of the Forestry boards, according to the circumstances and their own ability.

It would seem from the experience so far gained that the possibilities to further promote a high and sustained yield from our forests by proceeding further on the way of law giving have now been about exhausted. Further lawgiving with a view to enforcing measures in order to promote forestry would easily do more harm than good by reducing the interest and the initiative of the forest owners. A similar effect towards reducing the initiative of the forest owners would, indeed, follow by pursuing the line of subsidizing further than necessary. Even if, theoretically, great results could be attained along this line, if no consideration were given to the costs, such a policy would be unrealistic as it would fall out of line with other established economic policies. Thus in the last analysis there seems to be no other way to proceed without developing negative influences, than by the way of further educating the forest owners. This is a long-term proposition, but in the conviction that this is the only way that will now allow further achievements of a real importance this is also the way that has been chosen as the main line of activity by our Forestry boards for the future as it has been in the past.