Forestry in the Paper Industry

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Forestry in the Paper Industry

By Charles A. Rindt

The problem of reducing costs of operation is of prime importance in any industry. In this era of mass production and intensive competition especially, every cent of cost on the unit of finished product must be justified. Every cent that is run down and pushed off the cost of the finished product is a victory. It means that much advantage over other companies producing the same commodity that have not been fortunate enough to ferret out the unnecessary penny, and that much more stability for the more efficient organization.

In supplying a paper mill with wood, there are certain costs that are taken for granted as being necessary today for no more sound reason than that they have been necessary in the past. Quite contrary to this ingrained idea, these costs are not necessary and can be controlled; in many cases they can be eliminated. These costs are:

Freight on wood
Interest on investments in stored wood
Insurance on stored wood

These costs have been necessary because paper mills have developed without giving any attention to the possibility of eliminating them. The result is that today hundreds of thousands of dollars are being added to the cost of production that would not have to be added if a little foresight had been used and a little thought given to the location of the timber supply.

These costs vary for different mills depending on the length of freight haul that is necessary and the amount of wood that is held over as being a safe working supply. For an example of the magnitude of these costs, consider a mill that uses 100,000 cords of wood per year. A small amount of the 100,000 cords usually comes from farmers and small operators close to the mill who cut from stands of second growth and from small isolated patches of virgin timber. This local wood that is within trucking distance of the mill requires no freight rate, and from this up to 80 cents per cord of peeled wood for that wood that is out of the range of trucking distance and has to be freighted a sort distance. By far the greater bulk of the 100,000 cords comes from sources 200 to 300 miles distant from the mill and carries a freight rate of from $3.00 to $4.25 per cord of peeled wood. The annual freight bill under these conditions amounts to approximately $250,000. The price of the wood is no more when it comes from the area adjacent to the mill than
when it comes from 300 miles away; yet the actual cost to the mill is $4.25 per cord more from the distant sources than from the closer.

A full year's supply of wood in northern mills is usually held in storage as being considered a safe working supply. 100,000 cords of wood represent an investment of approximately $1,200,000, which is lying idle. The interest on this investment amounts to $72,000 per year. Usually 50 percent or more of this investment is represented by money actually borrowed and interest must be actually paid on it, but regardless of whether or not it is borrowed, the investment is there and is idle. What interest is not being paid out is lost from an investment that could be earning it and should be charged to the cost of the wood. This wood that is stored in the yards is insured, which adds another $5,000 to the burden that it must carry.

The total amount that must be added to the actual purchase price of the 100,000 cords is, therefore, approximately $327,000.

A mill that uses 100,000 cords of wood per year and reduces it to pulp by a chemical process, produces about 160 tons of paper per day or 50,000 tons per year. The burden of $327,000 of freight, interest, and insurance on wood, adds therefore, $6.50 to each ton of paper produced.

What would be the position of a paper company today that could cut $6.50 off the cost of each ton of paper that it produced? The present over capacity development in all grades of paper consumption, would mean little to that company. The ad-
vantage would not only mean a greater profit per ton of paper produced, but would also mean the ability to undersell competition, to consume freight rates on deliveries to a wider marketing field, and would result in a steady full time full capacity operation at the mill when other mills would be passing out of existence.

The possibility of reducing these costs were overlooked in the past by mills that were in a position at one time to control them. There are mills today which are so located as to be able to control them in the future. These mills are fortunate. If they take advantage of the possibility, they will, in the future, have a decided advantage over mills that are not so advantageously located. There are mills that have enough idle purely Forest Crop Land adjacent to them to supply them with pulpwood in perpetuity. In many cases, the land lies within trucking distance of the mill which if it were producing pulpwood, would eliminate freight rates, for the trucking cost from the woods to the mill would be no more than the trucking cost from the woods to the shipping point on wood being purchased today and which cost is figured in the price of the wood before the freight rate is added. In many other cases where the land does not lie within trucking distance, the freight rate on the wood produced would be a great deal less than the rate now being paid. In either case there would be a saving of most of the freight rate if not all of it and there would be no necessity for a reserve supply of wood in the yard for the producing area with its standing timber would assure a safe working supply not only for one year but for many.

This idle land is, in most cases, non-agricultural, purely Forest Crop Land and if not already delinquent, can be purchased from the owner at very low figures. Large blocks have sold for a dollar an acre and less and any amount can usually be bought for two dollars per acre.

In many cases, the land has second growth timber and reproduction established on it that will be ready to cut in periods varying from 5 to 30 years. This future value is not recognized by the general public, but nevertheless is a real value and often amounts to a great deal when expected future yield is taken into consideration. Those portions which have to be planted can be planted for between $5.00 and $6.00 per acre, and, when planted, are assured of 100 percent stocking and will mature for pulp wood in between thirty and forty years. By proper and wise selection in buying reproduction and plantable lands, it is possible to supply a mill from its own stands of timber in a relatively short time, at any rate before planted stands have become mature and before the present supply from the open market becomes inadequate.
It is a foregone conclusion that conditions are not going to become better in the future than they are today. While no advance in freight rates is predicted for the next 30 years, an increased length of freight haul is certain. If the source of supply recedes only far enough to increase the rate 50 cents per cord, $50,000 is at once added to the yearly burden carried by the wood supply. Interest rates too will no doubt remain the same, but if it is necessary to keep a year’s supply of wood ahead today, it will be doubly necessary to do so tomorrow and in the future.

150,000 acres of land, if handled right, will supply 100,000 cords of wood per year. At $2.00 an acre, the investment in land to supply wood in perpetuity is only $300,000, which is less than the yearly burden now being carried by the wood. The interest on the investment in land would be only a small portion of the interest being paid each year on the investment in stored wood.

By adding 50 cents per cord, as a probable conservative increase in freight rate and leaving interest on stored wood the same as it is today, a conservative estimate of probable future yearly costs to be borne by the wood supply is:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000 Cords</td>
<td>$300,000.00</td>
</tr>
<tr>
<td>Freight</td>
<td></td>
</tr>
<tr>
<td>Interest on Stored Wood</td>
<td>72,000.00</td>
</tr>
<tr>
<td>Insurance on Stored Wood</td>
<td>5,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$377,000.00</strong></td>
</tr>
</tbody>
</table>

The yearly costs on a 150,000 acre forest would be conservatively:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest on land investment</td>
<td>$9,000.00</td>
</tr>
<tr>
<td>Fire Protection, 10 c per Acre</td>
<td>15,000.00</td>
</tr>
<tr>
<td>Administration 10 c per Acre</td>
<td>15,000.00</td>
</tr>
<tr>
<td>10 percent yield tax (stumpage at $2.00 per Cd.)</td>
<td>30,000.00</td>
</tr>
<tr>
<td>Taxes under Forest Crop Law</td>
<td>15,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$84,000.00</strong></td>
</tr>
</tbody>
</table>

There is a difference of $293,000 in yearly expenses or $6.00 per ton of paper produced and the money spent on the Forest is spent on 30 years supply while that spent on wood under the present system is only one year’s supply. In addition to this material saving, the company owning its own timber supply is assured against increases in stumpage values. If stumpage increases in price during the next 30 years only as much as it has in the past 30 years, another $100,000 will be added to the cost of the open market wood and $100,000 can
be considered as being saved each year by the company practicing Forestry. $100,000 a year would finance an extensive Forestry program.

Even if all savings of freight, interest and stumpage were disregarded, the mill with its own wood supply is assured of a wood supply regardless of market conditions and wood shortages. It is assured of the species that it is equipped to use and is assured of wood of the best quality.

Another advantage that should not be overlooked, that a Forestry Department adds to a mill, is a lot of valuable advertising that brings results. The things that impress buyers and salesmen after a visit to the mill that has a Forestry Department, is the Forestry Nursery and the planted stands of pulpwood. These things lend an atmosphere of permanence and sincerity to a paper industry that stands out above all other features.

Those mills especially that are located so that they can control their future wood supply should be awake to the advantages that they have over mills not so located for the question "Can a paper industry afford to practice Forestry?" is fast changing to the question "Can a paper industry afford to not practice Forestry?"