

a high degree of mechanization and quality control. There is also a trend toward more complete integration through the acquisition of veneer and plywood mills and board plants. These factors are naturally leading to a higher degree of utilization which is exemplified by the conversion of sawmill residue for pulp chips.

The logging industry has been highly mechanized in Western Canada for a number of years and mechanization is now progressing rapidly in Eastern Canada, raising the output per man-day and leading to stabilization of employment in the woods. Ten years ago mechanical saws were just beginning to find general acceptance, but now they are found in all woods operations and the bucksaw is almost non-existent. Loading and transportation of logs and pulpwood is being done mechanically to an increasing extent with a consequent continuous reduction of the horse population in the woods. New and better logging machines are constantly being developed and experiments with pulpwood harvesting combines promise a high degree of mechanization in the woods wherever terrain conditions permit.

These and other changes are reflected in the following statistical data.

Subsection 1.—Woods Operations

In connection with operations in the woods, the forests provide not only the raw materials for the sawmills, pulp mills, veneer mills, charcoal, excelsior and other plants, but also the logs, pulpwood and bolts for export in the unmanufactured state, and fuel, poles, railway ties, posts and fence rails, mining timber, piling and other primary products that are finished in the woods ready for use or export. A number of minor forest products help swell the total, such as Christmas trees, cascara bark, balsam gum, resin, etc.

Estimates of woods operations attempt to give actual production figures for all items and are based partly on provincial forest service data for volume. Value, as currently estimated, excludes transportation costs up to and including 1960. In 1961, transportation costs are included to conform with the total activity concept.

8.—Value of Woods Operations, by Product, 1957-61

Product	1957	1958	1959	1960	1961 ¹
	\$'000	\$'000	\$'000	\$'000	\$'000
Logs and bolts.....	409,226	311,746	344,424	385,924	404,016
Pulpwood.....	340,235	275,154	320,244	356,915	369,663
Fuelwood.....	36,656	29,105	26,520	36,896	36,249
Poles and piling.....	20,931	8,146	7,495	11,967	17,145
Round mining timber.....	3,033	2,568	2,137	1,881	1,463
Fence posts.....	2,645	2,370	2,956	3,385	3,368
Hewn ties.....	664	317	235	160	36
Fence rails.....	327	276	268	253	255
Wood for charcoal.....	502	460	448	430	494
Miscellaneous roundwood.....	103	804	1,515	1,630	6,497
Other products.....	8,732	7,665	9,474	7,047	6,849
Totals.....	823,054	638,611	715,716	806,488	846,035

¹ Includes transportation costs; see text above.