Canada is one of the world's most fortunate countries in the quantity of fresh surface-water it possesses. There are probably more lakes in Canada than in any other country in the world — so many that they have not all been counted, much less measured. Estimates, however, have placed the total lake area at 756,000 km² (291,000 sq. miles). Since the country's total area is almost 10 million km² (about 3.85 million sq. miles), this means that about 7.6 per cent of Canada is covered with fresh water.

True measure of water-supply

Not all the water in Canada's lakes is available for use. It would be unrealistic to suggest, for instance, that the entire 22,900 km³ (5,500 cubic miles) of water in the Great Lakes, of which an estimated 7,500 km³ (1,800 cubic miles) are in Canada, could be removed and used. The water is very valuable where it is, as storage that can be drawn on in time of drought to be replaced in time of plenty. But the true measure of a country's water-supply is its streamflow rather than its storage capacity.

On an average annual basis, Canada's rivers discharge nearly 9 per cent of the world's renewable water-supply, roughly 107,000 m³/s (3,780,000 cubic feet a second). Set against a population that is less than 1 per cent of that of the world this is a generous endowment indeed; set against a territorial area that is almost 7 per cent of the world's land-mass, however, it is not disproportionate. Even though the flow is not uniformly distributed throughout the country, or during the year (a large part of the annual supply is frozen for several months during the winter, to be released only when spring arrives), 3,130 km³ (750 cubic miles) of water are available every year, replenished by the continual operation of the hydrologic cycle. (See Appendix I.)