

assured of stable finance to maintain reasonable supplies of tree seed, tree stocks of various ages, land, equipment, and trained personnel over a long period. Possibly even more important is the ability which funded finance provides to put into operation both a regular silvicultural programme at the times when age and condition of stands demand it, and emergent salvage programmes at short notice when sudden storms, epidemics, fires, or other mischances render necessary cleaning-up measures that could not have been foreseen. The lack of any one of these essentials will cause serious delays, if not a complete breakdown, in any large-scale programme of forestry works for rehabilitation purposes.

The much-discussed interest question was reopened with the Treasury during the year, and that authority has concurred in the recommendation from the Forest Service that forest operations should be relieved of interest on expenditure, past as well as future. The Service has long contended that, as national forests are fundamental to the well-being of the community, and as this country was originally well forested, one of the first charges upon the revenues from the harvesting of the original stand should have been reasonable reafforestation.

Unfortunately, from most of the original forest stand cut in the first half-century of settlement, little if any timber revenue was collected; and when gradually small dues were collected by the Crown from sales of Crown timber, the major portion of the revenues was still allocated to general territorial revenue only, instead of being earmarked for replenishment of the forest estate. When afforestation was begun, moneys for such work on a large scale were then secured by loans, with the result that interest on such loan advances would be capitalized and compounded during the life-cycle of the forest and would reach fantastic figures. The interest-rate decided upon and compounded was $4\frac{1}{2}$ per cent., which meant that in, say, a rotation of fifty years £1 initial expenditure would become £8 merely by the addition of interest. This deferment of reckoning and acceptance of a "cost" valuation inflated by compounding interest over such long periods can only be considered as unsound national finance. In short, had the accumulated revenues from the original stand remained available for forestry purposes, a replenishment fund would have existed from which all such advances could have been made and could have been effected free of interest. As these revenues were used for other purposes, they should be replaced from funds held for general purposes.

The Service has also under consideration the proper management of high-country areas for prevention of erosion, and as this question is of definite national benefit, funds required should be obtained from the Consolidated Fund and should not be treated as part of the normal expenditure from the State Forests Account as at present constituted.

SECTION F.—SOIL EROSION.

12. The Forest Service continues to advocate a realistic approach to the problem of soil erosion through Dominion-wide control of land-burning operations. No other measure can give such effective results either as quickly or as economically. A conservative estimate of its effectiveness is placed at 80 per cent. of the theoretical maximum. So aggressive is the New Zealand vegetation that no ground is too barren to resist its invasion—that is, if burning is controlled. Too often observation of erosion is limited to pastured slopes heavily scarred or even deeply gullied without realizing that every forest-clad hillside bears scars and gullies, though many are so healed by the ever-invading vegetation as to defy casual detection. But whereas repeated and uncontrolled burning aggravates and perpetuates the one, controlled use of fire arrests and heals the other. Even much of the harmful effect attributable to overgrazing is a direct result of indiscriminate burning and would therefore be corrected by control of firing operations. Simple as the premise is, it provides the most practicable and economic method of preventing accelerated erosion.

CHAPTER II.—ADMINISTRATION.

SECTION A.—PERMANENT AND TEMPORARY STAFF.

13. The work has imposed an even greater strain on many members of the staff than was the case during the previous year. This was due mainly to an increase