

and soil-drifting problems. By the end of 1937 some 97 of these associations had been formed, with a total membership of over 12,000, or roughly about one-tenth of the farmers in the drought area. Each association receives some small financial assistance for operating expenses, and members may receive small supplies of grass seed, trees, and other materials.

Agricultural improvement associations have proved very effective in securing the widespread adoption of cultural practices, such as strip farming, which are useful in combating soil drifting. A noteworthy feature of this work has been the assistance given by officers of associations to the Dominion Experimental Farms in organizing large-scale emergency operations for the control of soil drifting in certain dangerous areas, over 15,000 acres having been covered in southwestern Saskatchewan alone during 1937.

*Tree Planting.*—The value of shelterbelts of trees and shrubs for the protection of farm buildings and gardens against high winds on the open prairie, is generally recognized, and free planting stock for this purpose has been supplied to prairie farmers by the Dominion Government since 1901. Under the rehabilitation program some special assistance is given to farmers in planting farm-home shelterbelts, and model plantations are being established on district experiment substations for demonstration purposes.

The difficulty of maintaining large plantations in a region which is naturally treeless by reason of insufficient rainfall, however, has prevented any widespread use of shelterbelts for field-crop protection. With the object of determining definitely the effect of large-scale shelterbelts on crop production, especially as regards the control of soil drifting and the conservation of moisture, field-crop shelterbelt associations have been organized among farmers at four different points in the drought area, namely: Lyleton, Man.; Conquest, Sask.; Aneroid, Sask.; and Ribstone, Alta. In each of these associations the members plant shelterbelts around their fields covering an area of approximately one township. A similar municipal project for bluff planting at Kindersley, Sask., is also being assisted. As every possible effort is being made to ensure the success of these projects, the results secured will have a decisive influence on future afforestation policies in the prairies.

Supervision of the foregoing activities and seedling supplies are furnished by the Forest Nursery Stations of the Dominion Experimental Farms, located at Indian Head, Sask., and Sutherland, Sask.

*Soil Surveys.*—With the object of determining the nature, location, and extent of different types of soil in the Prairie Provinces, soil surveys have been conducted by the provincial universities for a number of years, with financial assistance from the Dominion Experimental Farms. Since 1935 this work has been paid for from rehabilitation funds, in order to accelerate the mapping of the drought area. By the end of 1937 all of the drought area in Manitoba and Saskatchewan, and more than half of the area in Alberta, had been covered by a reconnaissance survey.

*Soil Research.*—Investigations into the fundamental principles of crop production under semi-arid conditions are in progress at the new Soil Research Laboratory, Dominion Experimental Station, Swift Current, Sask. Special attention is given in this work to soil moisture problems, soil-drifting control and soil fertility. A certain amount of soil research work is also being conducted in co-operation with the universities of each of the Prairie Provinces.