

which are owned by the federal Government, such as our National Parks. The municipal authorities also have a share of the responsibility. However, the magnitude of the problems and the importance to all Canadians of the intelligent use of our natural resources have made it necessary for the federal Government to take an active interest in conservation as well. Without wishing to invade the jurisdiction of the provinces, we have in the past few years taken several steps to assist them in this task.

I begin with the Prairie Farm Rehabilitation Act, passed in 1935, and the Marshland Rehabilitation Act, passed in 1948. Through the P.F.R.A. over \$77,000,000 have been spent to carry out land utilization and water conservation programmes in Western Canada. The object of this legislation is to convert submarginal lands to pasture, and to assist owners or occupiers of land in these areas in establishing themselves in less arid sections of the country. Over 1½ million acres of land have been converted into 59 P.F.R.A. community pastures to date and are serving to feed 90,000 head of cattle and 37,000 head of horses. In addition 30,000 dugouts, 6,000 stock-watering dams and over 27,000 irrigation projects have been completed. The largest of the irrigation projects have been completed, these being the projects connected with the St. Mary and Bow Rivers in southern Alberta.

These completed projects have already justified themselves in economic terms. But their full value will not be apparent until, as we know from experience will happen, there is a recurrence of dry years on the Prairies.

Under the Marshland Rehabilitation Act which, in contrast with the P.F.R.A., deals with the problem of an excess rather than a shortage of water, 119 areas, comprising 16,155 acres had been reclaimed by March 1953, and over 53,000 acres have been protected from the sea in the Maritime Provinces.

In order to establish a basis for soil conservation measures, soil surveys have been undertaken in Canada as joint projects of the federal and provincial departments of agriculture and the agricultural colleges. Under the soil survey programme which calls for a systematic study of all present and potential farming areas, 190 million acres have been mapped thus far. More detailed surveys have been conducted where they were required to meet special needs. It is on the basis of these surveys that the P.F.R.A. projects, and a good many others, have been undertaken. Most of the projects are carried out by agreements between the federal Government and the other authorities most directly concerned.

The federal Government has also played an important part in developing and improving farm methods and techniques in order to assist the farmer in obtaining maximum benefit from his land. In addition to the Central Experimental Farm here in Ottawa, there are farms and stations or sub-stations in every province operated by the federal Government for this purpose. The results of research have been particularly useful in preventing erosion. The soil research laboratory at Swift Current, for example, has developed much of the basic knowledge on which current