Section 4.—Federal and Federal-Provincial Resource Development Programs

Water Development

Since 1935, the Prairie Farm Rehabilitation Administration (PFRA) has provided engineering and financial assistance in respect of some 91,000 small dams and dugouts (small artificial ponds for water collection) to supply water for livestock, irrigation and domestic use. In the main, such works serve individual farmers but some serve groups of farmers or communities. The PFRA provides engineering services and usually pays about 50 p.c. of the construction costs, for a total cost of nearly \$24,650,000.

Six minor irrigation projects in Saskatchewan and one larger one in Alberta provide water for 160,000 acres of land, with benefits to about 1,000 farmers. Major irrigation projects include the St. Mary Irrigation Project, jointly undertaken by the Federal Government and the Government of Alberta in 1946. The St. Mary Dam, completed in 1951, impounds water from the Belly and Waterton Rivers, providing sufficient water to irrigate approximately half a million acres. The South Saskatchewan River Development Project now under construction involves building of a main dam 210 feet high and 16,700 feet longthe largest rolled earth dam in Canada and one of the largest in the world. Located between the towns of Outlook and Elbow, this dam will create a reservoir 140 miles long with a total capacity of 8,000,000 acre feet of water (usable storage of 2,700,000 acre feet). The project will provide water to irrigate 500,000 acres of land, the power potential is 475,000 kilowatts, and the artificial lake will have considerable recreational potential. A second, smaller dam adjacent to the height of land between the South Saskatchewan and Qu'Appelle Rivers will divert water into the Qu'Appelle-Assiniboine system to provide much-needed water supplies for irrigation and the considerable urban areas of the watershed. The cost of developing the main reservoir is \$100,000,000, of which the provincial government is contributing \$25,000,000 By the spring of 1966, construction of the two dams was nearly completed and Federal Government expenditures amounted to \$101,000,000 for construction costs alone.

Land reclamation projects have been carried out by the PFRA in Manitoba along the Assiniboine River between Portage la Prairie and Headingly, at various points in the Interlake Region, and along the Northwest Escarpment. The Assiniboine River project includes creation of a large reservoir near Shellmouth and construction of a diversion canal near Portage la Prairie to carry floodwaters to Lake Manitoba. Construction of the main dam began in 1964.

Smaller irrigation and water-supply projects assisted by PFRA number 4,989; most of them serve individual farmers but a number serve adjacent farms or small communities and 60 of them provide substantial water supplies for various uses. Since the inception of the program, some \$8,213,000 has been spent by PFRA on such projects.

Under the provisions of the Atlantic Development Board Act of 1962, amended in 1963, a \$100,000,000 Atlantic Development Fund was established to support projects which would contribute to the growth and development of the economy of the Atlantic region. Among the projects initiated during the Board's first three years of operation were a number relative to water use for power production and for industry, the most notable being a \$20,000,000 grant toward the \$113,000,000, 600,000-kilowatt Mactaquac dam in New Brunswick and a similar grant toward Newfoundland's \$60,000,000, 224,000-kilowatt Bay d'Espoir hydro-electric project. The Board also assisted in developing water supplies to meet the needs of industries—mainly fish-packing plants—in some 30 communities, and committed \$2,000,000 toward abatement of industrial pollution in inland waters of the region.

The program under the Agricultural Rehabilitation and Development Act (ARDA) included, during the first three years of the program to Mar. 31, 1965, some 207 soil and water conservation projects for which the Federal Government shared the costs to the extent of \$12,394,000; the projects consist mainly of drainage and dyking of potentially arable land.