

in 1949 in anticipation of construction to begin the following year. Construction work above Ryan Creek has been held in abeyance until further experience can be gained from reclamation work already undertaken.

Special Investigations in Connection with Irrigation Projects.—The four principal phases of pre-investigational study in the field of engineering include: surveys (exploration), soil mechanics, drainage and hydraulics, and design. These studies are undertaken by P.F.R.A. to gather the fundamental groundwork of technical and other basic information that is required before construction of any project is undertaken. Considerable work in each of these fields of study was undertaken during the 1949-50 fiscal year, together with co-operative studies using the services of existing federal departments.

Land Utilization

In addition to cultural and water-conservation activities, the rehabilitation of drought areas involves the conversion of large tracts of submarginal land, which had been initially cultivated, to a permanent grass cover for live-stock production and the re-location of farmers residing thereon. To this end the P.F.R.A. Land Utilization Program has constructed 81 community pastures, resulting in the reclamation of 1,502,750 acres of submarginal land. During the 1949-50 construction season, 62,910 acres of this area were enclosed with the construction of two new pastures in the Rural Municipalities of McCraney and Caledonia and several extensions to existing pastures.

During the 1949-50 fiscal year, summer grazing was provided for over 70,000 head of live stock owned by 5,500 farmers living on lands adjacent to these pastures. An extensive pasture improvement program is in effect on all pastures and is immediately initiated as new areas are enclosed. This policy has more than doubled the 1938 average carrying capacity on pasture land. The three improvement policies most extensively practised in all pastures are: (1) artificial regrassing—since 1938 approximately 150,000 acres of land in community pasture have been regrassed; (2) development of stockwatering sites—to Mar. 31, 1950, 800 stockwatering dams, dugouts and wells have been constructed in community pastures for the purpose of facilitating the more efficient utilization of grass resources; and (3) pasture management and controlled grazing—with the application of scientific principles to the proper utilization of grass resources on pasture lands, P.F.R.A. has been able to greatly increase the beneficial use of grass resources.

PRAIRIE FARM ASSISTANCE ACT*

The Prairie Farm Assistance Act, passed in 1939, and administered by the Federal Department of Agriculture, provides for direct money payments by the Federal Government, on an acreage basis, to farmers in areas of low crop yields in the Prairie Provinces and the Peace River District of British Columbia. The Act was designed to assist the municipalities and provinces, in years of crop failure, to meet relief expenditures which would normally be too great to be assumed by them. The Act provides that payments be made to farmers under certain conditions and terms and, in order that the Federal Government's costs may be defrayed to some extent, it is required that 1 p.c. of the purchase price of all grains (wheat, oats, barley and rye) marketed in the Prairie Provinces be paid to the Federal Government and set aside in a special fund for the purposes of the Act.

* Contributed by the Department of Agriculture, Ottawa.