

*The Budget—Mr. McCusker*

We must ascertain whether (1) the water supply is adequate. That has been well established, I think. The South Saskatchewan river, through its tributaries, collects the run-off water from a large part of the east slope of the Rockies. There is sufficient water there to supply to the United States its share, to irrigate all the land in Alberta and Saskatchewan that is available for irrigation and have sufficient left over to supply the water power to develop this 400 million kilowatt hours of electric energy that I previously mentioned. It would also act as a reservoir and feed down the Saskatchewan river enough water to increase the potential hydro-electric production at Fort à la Corne by a hundred million a year.

(2) We must ascertain whether the climate and soil are suitable to assure much higher productivity on irrigated land than on dry land; (3) whether the project is feasible from an engineering standpoint; (4) we must ascertain whether farm units are of a size for economical and efficient production; (5) whether the financial burden placed on the farmers is light enough to permit better land use and to promote enterprise; and (6) whether the markets are sufficient to encourage development.

The South Saskatchewan river project has been studied in the light of the above factors. It has had the benefit of the experience of other projects in Canada and the United States. There is no water conservation project in Canada that has been so fully studied. A complete set of reports has been tabled in the House of Commons. The facts have been analysed by the most competent technical and engineering experts in Canada. In addition, the best consultants have been employed in Canada and the United States. They include Major General H. B. Ferguson, retired United States army engineer, Washington, District of Columbia, consulting engineer; Dr. A. Casagrande, graduate school of engineering, Harvard University, Cambridge, Massachusetts, consultant on soil mechanics and foundation problems; Dr. J. A. Allan, consulting geologist, professor emeritus, university of Alberta, Edmonton, Alberta, consulting engineering geologist; and Dr. O. W. Israelsen, research professor of irrigation and drainage, Utah State Agricultural college, Logan, Utah, consulting engineer on irrigation and drainage problems.

In comparing the South Saskatchewan river project with Alberta and British Columbia projects, it must be remembered that the former is a multiple project of power and irrigation, whereas Alberta and British Columbia projects are mainly irrigation.

[Mr. McCusker.]

Therefore, it is necessary to consider the South Saskatchewan river project on its merits.

In the report which was tabled all phases of this project were dealt with: climate, soil, engineering feasibility, economics of irrigation, power, recreation and other benefits. I am not going to review them tonight. The report has been tabled in the house and is available for the study of anyone who is interested.

The South Saskatchewan river project is in the heart of one of the driest parts of Saskatchewan. Its climate varies greatly and drought conditions occur periodically and cause tragic losses to the farmer, costly expenditures to governments, and the loss of purchasing power to business, both east and west. While these conditions occur periodically, yet this same area has produced hundreds of millions of dollars of wealth to Canada. This fact must not be forgotten. Therefore, it is in the interest of Canada to ameliorate the problems of drought and bring stability to agriculture. A reference to the situation in 1937 is a definite example: (a) Owing to drought it was necessary to ship into Saskatchewan over 500,000 tons of hay to maintain the livestock industry that year. This hay came from Ontario, Quebec and the United States and (b) shortage of grass and hay resulted in the forced marketing of over 480,000 head of cattle at ruinous prices, namely, one-half cent to one cent per pound. The whole livestock economy was upset. In addition, farmers lost their breeding herds and it has taken over fifteen years to build them up again.

With the development of the South Saskatchewan river project the drought problem would be greatly minimized and eventually we would have a permanent agriculture without the necessity of agricultural aid during drought periods.

The position can be emphasized further. In 1937, one crop district produced 600,000 bushels of grain, yet in 1942 the same crop district produced 92 million bushels of grain. Such a contrast is unbelievable. Yet this same area over a period of thirty-five years has produced an average of 40 million bushels per year. These facts in grain and livestock production point out the necessity of insurance against drought.

In order to develop this irrigation project, a dam must be built at Elbow on the South Saskatchewan river and a second one at the third meridian in the Qu'Appelle valley. The reservoirs thus created would extend 140 miles back in the Saskatchewan river and