

Now, granted a lot of this has been necessary because of the great rush of the development during the last war and in the prosperous years after the war, but I do not think it has all been necessary, by any means.

Canada has vast quantities of these underdeveloped northern areas, and population pressure is destined to develop them one way or another.

Canada must export in order to maintain and improve the standard of living we all enjoy. We are in competition with other countries, some highly populated, some under populated, as we are.

In order to maintain a healthy position in world trade, we must keep our costs down. This requires larger population and good land use in conjunction with the development of natural resources. Our northern developments for resources are costing far too much, and if this situation continues, we shall be priced out of the world market. I think the northern developments cost far too much because of the one-shot system we are using. What I mean by that is that there will be a forest research project in one part of the north, and maybe 50 miles away there will be an agricultural soil study, the two surveys are not brought together. With mining exploration and development, and where communication and national defence centres are constructed there could be consideration given to the land as a whole in an overall plan for the area.

The only alternative is to put a concentrated organized effort into the study of our land and its resources. We must develop the north, but at a reasonable cost, by making the utmost use of all the natural resources. In order to do this, we must understand our geology, climate, soils, forests and wildlife, and their relationship. Granted, there are numerous agencies investigating these at present, but there is no concentrated effort or overall co-ordinated plan. Land use studies should be carried out in detail and the effort of all agencies equipped to do the work is required; for this maximum effort, a centralized coordinating body is required to eliminate overlap and one-shot surveys.

I was associated on forest and soil surveys, and land use surveys from 1947 to 1951 with Mr. Hills of the Ontario Department of Lands and Forests; from 1951 to 1956, I was Chief Soil and Site Officer for the Federal Forestry Branch, covering all of Canada. In both cases I resigned chiefly because of the difficulties encountered between departments in the federal Government, between dominion and provincial Government agencies, and between industry, Government and university research organizations. I was mainly occupied with practical level of research and I became very discouraged with the difficulties one ran into when trying to set up research projects and land use studies in an area with other agencies. These difficulties are most discouraging and wasteful of time and money. In view of the developments in the U.S.S.R., these difficulties must be overcome if we are to carry out the research necessary to develop our resources, plan good multiple land use, build up our population and produce for export at competitive prices.

Now I come to my present occupation. Private survey companies operate on the same basis as private industry in general, the ability to turn out an economical product of good quality, otherwise they do not stay in business. Especially during the present period of international crisis, and generally to assist in the development of Canada it is important that survey companies maintain a high calibre in all departments.

This is particularly true of air survey companies equipped to take and interpret air photographs, carry out Shoran and other map control work and mapping surveys, offer specialized airborne detection services, fly geophysical surveys as well as offer specialized transportation, training and repair services. The air survey industry feels that it has a definite place in Canada to carry out surveys quickly, competently and economically. If there is to be a master plan of land use in Canada, the air survey industry has an important