

Supply—Agriculture

without any official coming to the area to examine local conditions. I do not think that is good enough. I suggest there could be much more co-operation between those undertaking studies of this nature under this research branch and those who are responsible for lending money to farmers.

Finally, as I said, there is such a diversity of conditions that, for instance, in the Arrow lakes area you can grow Delicious apples, yet 20 miles to the north the heat is such that you cannot grow Delicious apples. I wish to suggest, therefore, that there should be an extension of the experimental stations. I am not suggesting anything extensive. I think the department could use more of the farms in the area to demonstrate their suitability for growing certain tree fruits, small fruits, and so on. For instance, in the Renata area peaches are grown to excellent advantage; but 30 miles to the north, under what would appear to the casual observer to be identical conditions, one would be ill-advised to go into the production of peaches.

I should like the minister's comments in this connection, because I think our staff could be used to good advantage in making studies of these regional and local conditions.

Mr. Harkness: Mr. Chairman, in so far as what you might call a general survey of the activities of the research branch is concerned, or the magnitude of this work, I think the amount of the vote, which for this year is a little more than \$30 million out of a total for the whole department of \$106 million, indicates the importance we attach to research. The fact that we are allocating to research something in the neighbourhood of 30 per cent of the total funds available to this department is a good indication of the importance we attach to it. The research branch, of course, carries on an extremely wide variety of research into such things as forest biology problems, all sorts of insect pests, all kinds of plant breeding, plant diseases and so on.

I do not believe I should take more of the time of the committee at this moment to go into the hundreds of different types of research projects which are carried on by the research branch. I am sure the hon. member has a very good idea of the vast amount of detailed scientific work which is done by this branch in an endeavour to produce better varieties of plants and animals, to guard against diseases which attack them, to evolve means of eradicating these pests or keep them under control.

As far as a tie-in with economic research is concerned, there is of course a great tie-in

[Mr. Herridge.]

in that regard. The economists in the research branch collaborate closely with the people on the experimental farms and so forth, particularly with regard to studies as to the suitability of a particular area for a certain type of production. An area might be quite suitable from the purely physical point of view, but in reference to the distance from markets and so forth it might not be a practical operation to produce a certain type of product in that area. As I say, there is very close co-operation between the economics people on the experimental farms on the one hand and the research branch people on the other hand with regard to matters of that kind.

As to greater study of soils and climates in particular areas, may I say that up to the present time there have been soil surveys for most of the settled areas of Canada. There has been a classification of those soils with regard to what you might call geologic type, and also from the point of view of what they are capable of producing. This consideration, of course, is tied in with the climatic conditions in the particular areas. As the hon. member knows—and he made some mention of the fact—we have a large number of illustration stations and illustration farms where particular experiments are carried on in order to see whether a particular type of plant is suited to growth in that area. That sort of thing is taking place constantly on a very widespread scale.

As to loans and a tie-in between the Farm Credit Corporation and the research branch, may I say that there has been throughout, under the Veterans' Land Act, quite a close tie-in between the regional supervisors and credit advisers under the Veterans Land Act, who now are also acting as regional supervisors and credit advisers for the Farm Credit Corporation, and the local agronomists in Quebec and district agriculturists in other parts of Canada, and also with the dominion Department of Agriculture.

Mr. Herridge: I think that is a big improvement in administration.

Mr. Baldwin: I should like to make a few comments on what I think is one of the most important of the many-pronged attacks which will have to be launched in connection with the problems of agriculture. I refer to the question of research into rural development or rural redevelopment. Some time ago I observed that the United States department of agriculture were concerned, and had been since 1956, with this important phase of agricultural research, and I wrote for and obtained some of their pamphlets. By the way, if any hon. member should be particularly interested, may I say that I have a number of these pamphlets here. I am thinking particularly of