

Improved rotations and land utilization: We are going to have to do something in western Canada before too long. In parts of that country grain has been grown for more than 50 years, and there does not seem to be much reduction in yield; but, sooner or later I think we will have to develop some sort of rotation system.

In southern Ontario, where they are growing cash crops, they have run into trouble because they have not had sod crops or organic matter in the soil, because they have grown cash crops year after year and put nothing back.

Improved varieties and species: I do not intend to say anything about that subject, but it is a tremendous field for improving our production.

Mechanization: You have had other witnesses deal with that problem. While I think mechanization has been a great boon to the western farmers, I am wondering whether it has not put many of the eastern farmers out of business.

Senator McDONALD: It has created a very difficult situation for them.

Senator TAYLOR (*Westmorland*): You don't need to wonder any more—it has put the eastern farmers out of business.

Dr. RIPLEY: I am wondering whether it is good or bad; I expect I can get supporters for both sides. But sooner or later the farmers in eastern Canada are going to have to shift to larger units. We do not like to think of the small farmer going out of business, but it must be remembered that the average size farm in eastern Canada is 120 acres.

Senator McDONALD: It is bad from the standpoint that many of the small farmers have to move into the smaller centres, where from a social standpoint it is more difficult to bring up a family.

Dr. RIPLEY: There are lots of social and economic aspects to this problem. It has reflected on the machinery companies: they have sold their combines, forage crop harvesters and hay balers to the farmers, and they have not been able to support themselves and pay for the machinery on a 100-acre enterprise. Now the machinery companies are in difficulty. I am told that there isn't a binder manufactured in Canada, that we now have to go to England for them. This may also become true of the seed-drill. The combines have pushed the binders off the market as far as the manufacturers are concerned.

Senator McDONALD: I wonder if it would not be correct to say that the mechanization on the farms today has created the leading problem amongst small farmers, especially those in the eastern provinces?

Dr. RIPLEY: It has made matters very difficult for the small farmer, but I am not prepared to admit that it has been a terrible calamity. The labour situation has been such that we have been driven to mechanization. We can't get people to work on the farms, and there is nothing to do but mechanize. The people are going into industrial centres.

Senator HAWKINS: Whether we like it or not, or whether it is detrimental or not, the farmers of eastern Canada have to go to larger units.

Dr. RIPLEY: I believe that is true.

Senator HAWKINS: When you take note that 60 per cent of the farms in Canada have an income of something like \$2,600 and a large percentage of this is in eastern Canada, it becomes obvious that they have to have greater production. If that \$2,600 income was net, it would be a different matter, but when it is gross, that presents an impossible situation.

Dr. RIPLEY: That is right.

Senator HORNER: Speaking of larger units, I heard the other day of a man 50 miles from here who was not doing very well on his farm; he began to