

product, but mistakes can be made and a few companies probably might deliberately put in smaller amounts of nutrients than is called for, but generally speaking it is a pretty good set-up.

Senator McGRAND: What is the source of fertilizer material?

Dr. NIELSEN: Our potassium fertilizers come from Europe and also from the Carlsbad area in the United States. We have large supplies of potash in western Canada, enough to supply our markets here but with regard to our Canadian supplies we have much more than we can possibly use but the cost of transportation makes it impossible to use that in all parts of Canada and so they import a lot from Europe and the United States. The phosphate fertilizers are imported. We get some from Africa, and some from Florida, and for our western markets some from Utah. Our nitrogen fertilizers are of a little bit different nature. We have many of those. Our anhydrous fertilizer is a synthesized fertilizer. We get some natural fertilizers, like sodium nitrate say from South America but ammonium nitrate we get from the States. The source of these materials are all good sources. It is hard to get one which will run under a minimum content of say potassium, unless something else is mixed with it. Muriated potash runs about 60 per cent K20.

Senator BRADETTE: There is very little raw material for making fertilizers in Canada?

Dr. NIELSEN: At the present time, Consolidated Mining and Smelting out west has supplied prairie farmers for a long time.

Senator BRADETTE: But that does not apply to lime.

Senator TAYLOR (*Westmorland*): Why is it difficult to get sodium nitrate?

Dr. NIELSEN: Sodium nitrate is not one of our best fertilizers.

Dr. RIPLEY: Chili was the only source of fertilizer at one time, it was the one source and a rather expensive source though, and the synthetics that are manufactured now are competing with them in price so there is very little Chilean nitrate used now. We do manufacture ammonium nitrate in Canada at Thorold.

Senator BRADETTE: We produce in Canada all the lime that we use on the land?

Dr. NIELSEN: Pretty much. You may run into a situation where across the border there is a better supply for a certain district. We could supply the market in Canada for fertilizers rather well.

Senator HAWKINS: Taking into consideration the high cost of our production here, we are not handicapped in world competition? Our fertilizers do not cost us more, comparatively, than those used in Europe.

Dr. NIELSEN: I would say that would be true.

Mr. Chairman, I have about three more sentences to offer on the subject of erosion, leaving fertilizers aside for the moment.

Dr. Hill spoke of soil drifting, which is erosion. I would like to offer a few words about water erosion, or erosion generally, which is the very subtle waste of our land. I don't know whether you have paid particular attention to the problem of erosion, but I do know that it has been more pronounced in the east than in the west. Those of you who were raised on farms will remember that you discovered a little gully in the field, and with a little tillage operation you covered it up; the next year the rainfall makes another gully, and you cover that up. Over a period of years you are losing a lot of soil. The same is true of wind erosion: you notice your fence posts getting shorter and shorter; the soil is piling up around them!