THIS TRANSCRIPT HAS NOT BEEN THOROUGHLY EXAMINED FOR ACCURACY AND IS, THEREFORE, AN UNOFFICIAL DOCUMENT.

Standing Committee on The Alberta Heritage Savings Trust Fund Act
Thursday, September 13, 1979

Chairmant Mr. Payne

2:00 p.m.

MR. CHAIRMAN: I'd like to bring this afternoon's meeting of the heritage fund committee to order.

In your behalf I'd like to welcome the Minister of Agriculture, Mr. Schmidt, with us this afternoon. Mr. Schmidt has indicated that he would like to make some brief opening remarks related to those heritage fund related expenditures within his portfolio. Perhaps we could have you do that now, Mr. Minister.

MR. SCHMIDT: Thank you very much, Mr. Chairman, members of the committee.

The Department of Agriculture is involved with two basic programs tied to the Heritage Savings Trust Fund, the first being irrigation rehabilitation, which was announced some time ago. Agriculture's portion was \$90 million. The other is Farming for the Future, which was a \$10 million amount established for a period of five years.

The expenditures in irrigation rehabilitation, of course, are tied to the upgrading of the existing systems. To date the majority of the expenditures and both the job itself and the amount and the direction are recommendations that come from the irrigation districts themselves. So the expenditures to date, which total about \$31 million of the \$90 million allocated, have been mainly in the upgrading of existing ditches, some through concrete lining and some through plastic lining, and of course some ongoing improvements which are necessary, mainly with the carrying ditch which is part of the total operation.

The Farming for the Future has expended about \$3 million as of new, and of course there are still a few more to come in before the balance of the year. We've had one full year of applications of various areas throughout Agriculture, and they run about \$2 million a year. So at present, with about \$3 million in the field for areas of research, we're probably well into the research aspect. Of course it's too early in the game to assess the results, because the projects that have been applied for are still ongoing.

With that, Mr. Chairman, if there are any questions. Roughly one-third of the irrigation amount of \$90 million that was set aside has been expended to date for the upgrading of the irrigation supply area throughout southern Alberta, to all the irrigation districts; just over \$3 million -- but hopefully at the end of this year would be about the \$4 million; in other words, an acceptance of about \$2 million a year on a two-year program so far out of the total five-year program of Farming for the Future.

MR. CHAIRMAN: Thank you, Mr. Minister. Any questions, then?

MR. R. SPEAKER: With regard to irrigation rehabilitation, the report done on the Oldman River that has just been made public indicates that they'd like to bring the districts up to an 80 per cent efficiency level. That's going to reflect on moneys available for rehabilitation. I wonder what the minister's present feeling is about that. Are the funds at present adequately meeting rehabilitation needs? Are we working at a maximum pace? Can that pace be accelerated so that in eight to 10 years we can be up to 80 per cent efficiency?

MR. SCHMIDT: Mr. Chairman, I would have to think that any reply to that . . . You go back -- suggestions within the report itself also indicated that there be a change in the sharing formula. In a very general way I would have to say that the development today is perhaps at a page that the districts themselves can manage financially in meeting the shared responsibility on an 86:14 base. Now, if you wish to accelerate the program and if the funding arrangements stayed the same it means more money from the districts in a shorter period of time.

I would have to say in a very general way that in discussion with the districts they feel that they're running at about a pace which they can handle. If they wish to accelerate it, I don't see any problem; it just means that we would achieve the expenditure of the remaining \$60 million at an earlier date. I don't think it's a problem. I would have to think it would be entirely dependent on the financial arrangements of the districts. We haven't placed a restriction on it. We've looked at it from a need base.

- MR. R. SPEAKER: At the present time the department and you are in the process of reviewing this, with a view that there may be a request for increased funds from the Heritage Savings Trust Fund. That's a possibility? Over the \$90 million.
- MR. SCHMIDT: What was the last bit? I missed it.
- MR. R. SPEAKER: Over the \$90 million. Potentially you could be coming back to us and asking us to recommend a higher allocation of funds for irrigation rehabilitation.
- MR. SCHMIDT: Well, I guess in a very general way, Mr. Chairman, the announcement of the total amount was set aside to achieve a certain factor and a rate of upgrading. That was some time ago, and of course the costs have changed somewhat. Whether or not ue will be able to achieve what ue thought could be achieved at the time of the announcement is another factor. I would say that from Agriculture's point of view we're out to achieve a workable system. When the funding is gone, if we haven't achieved that aim I would be quite happy to approach for further funding.
- MR. NOTLEY: Mr. Minister, this morning we met with the Minister of Environment, who is in charge of the headworks investment under the irrigation investment, and he indicated that there would have to be discussions with respect to the ECA report on the Oldman which, as I recollect, really recommended that we move quite strongly in the area of irrigation rehabilitation. If my memory serves me right, the figure cited was somewhat beyond what we are presently proposing to allocate. I guess that really raises a question in my mind as to what process is going to take place in the Department of Agriculture along with the irrigation districts to evaluate that report so that we'll be in a position next year to decide whether we could quicken the pace consistent with the ECA report.

MR. SCHMIDT: Mr. Chairman, we've had the opportunity to have just a very preliminary discussion with the representation from the irrigation districts, and indeed a very cursory remark Irrigation Council itself. I would think that from the Department of Agriculture point of view, although the review of the report itself will be tied, and indeed recommendations will be coming from the irrigation districts themselves, the acceleration of either the expenditure of funds or the increased amount of work that each district would like to do, we would be very pleased to look at and hear whatever recommendations they have. An escalation of the physical amount of work, of course, is tied first of all to the time that you can do it. There's only so much work you can do. So it's not always the expenditure or the lack of funding that ties you to the amount of upgrading that's done. At the present time I don't see any areas that would stop a district, either financially or otherwise, as far as the authorization on behalf of Agriculture. If there were any constraints on their program, it would have to be a matter of timing.

MR. NOTLEY: If I could just pursue that, Mr. Speaker mentioned a figure of 80 per cent utilization of water. I believe it's what, about 30 per cent in several of them now? This \$90 million we've allocated would begin to do the job, but surely it would not bring the utilization of water up to 80 per cent in all the districts, would it?

MR. SCHMIDT: I'm convinced at this time that if you're going to achieve 80 per cent utilization there is more tied than just the upgrading of existing ditches. I think, and so do the districts — have recognized at this time an area of research which they are not that familiar with, and it has to tie in with water — I hate to use the word "wastage", but it disappears and no one gets any benefit. So it would have to be either wastage through seepage or mismanagement, this type of thing. Mismanagement is a very small factor, because it arrives and you either utilize it. It's the degree of utilization once the individual gets it. We've agreed that some areas, in both the amount of water and the use of water, and in some cases the use of too much water, should come directly as part of a research program to establish what the parameters should be and the amounts. Some areas, of course, will need some drainage. The salinity is a problem that's created in some areas because of the amounts of water used over a period of time.

So I would think that to achieve an 80 per cent utilization factor is certainly going to take an upgrading, because there are some pretty old ditches that leak quite badly. The priority that's placed by districts sometimes lends itself to those channels that carry the most water from A to B, and we may be losing the majority of our water in some of the smaller ones. Those are areas that we collectively, both with the districts themselves and with the Irrigation Council, are going to have to arrive at some degree of priority of where the greatest losses occur, and then use those as a priority for the upgrading. I think that coupled with some of the areas of research, we may achieve an 80 per cent factor, but it's going to take some time.

MR. NOTLEY: Have research funds now been committed? Surely not as part of the \$90 million, but under Farming for the Future have you you committed any funds? Or is this essentially a bringing together of research done by other jurisdictions? I raise this because in a meeting I had with the irrigation districts about a year ago I am aware of the fact that they are doing quite an active job of finding out what's going on in the United States and other

places. Is the Irrigation Council itself commissioning specific research and, if so, is any of it coming under heritage trust fund investment?

MR. SCHMIDT: We discussed it this spring, I guess it was the end of May, with the various irrigation districts. Collectively through their association they agreed that there were perhaps three areas of research they would like to do. We invited them to bring together submissions in those three areas and submit then to the Farming for the Future program, to avail themselves of the available funding. In recognition of the need for that type of research, and I suppose because they weren't too sure just where funding was available, they had sat reasonably tight. But it's my understanding they now have those three submissions well under way, to make application for those particular areas that have been the biggest problem to them.

MR. PAHL: It seems to me that irrigation rehabilitation and expansion is one area where we are doing what I would think would be an effective job of translating non-renewable resource dollars into something that could be more likely to be considered a renewable strengthening of the economy over a long, long period of time. I have a supplementary question about what you mean by the 80 per cent utilization of water. But would it be possible to indicate to the committee whether there has been a sort of indication of what the probable return on investment or, if you will, economic multiplier of dollars spent on irrigation would provide to the province overall?

MR. SCHMIDT: Mr. Chairman, I don't have the figures at my fingertips as to the benefits in dollars and cents that would accrue, other than to place before you first of all the question in regard to 80 per cent utilization. It's just a pure percentage factor, a factor that you dump 100 gallons of water in at one end and you should get some benefits. We realize that through evaporation and sheer normal loss you're only going to utilize a portion of that. But that loss should be in areas where it's rather difficult that we as individuals should be able to prevent. At the present time we know, because we're using in many cases a rather old system, well done at the time, but over a period of years -- certainly recognized and show the signs of many, nany years of use -- that we are losing water which we shouldn't be. The water is the commodity that really bothers us, from the point of view that it is number one. The expenditure of funds, regardless of how many we have and in what direction, unless we have the water it really doesn't make that much difference what kind of network or system we have.

Getting back to the investment, we either deal . . . I suppose in a very general way I've heard the figure -- and I'm not going to argue the figure -- between dryland in the particular area and irrigated land, Ray, I think -- it's been bandled around -- it's about 5:1, if you're looking at basic production. So it's rather difficult to arrive at a dollar and cent figure as to what the benefits would be. All I can say to you is that without water, straight dryland farming, which is tied strictly to Mother Nature and absolutely no guarantee from year to year -- that we are now through irrigation producing on a 5:1 base to dryland farming.

Another factor -- because of that type of production we are providing fewer acres to a greater number of people who are making a livelihood in the agricultural industry. In other words, without that, one farm could be 3,000 acres, and the question is: if you have sufficient people who all want to farm, and each one gets 3,000 acres of dryland, we're probably going to run out of land before we run out of people who want to farm. So we're achieving

in that aspect. We're achieving from a guaranteed aspect, because as long as we can provide that water in those ditches to the irrigation districts, we can guarantee that type of production. So it's an insurance policy, which is very, very difficult to guarantee in the rest of Alberta; we're either short of water or else have too much, or it freezes or else it turns snow-white. There are many fluctuations between good and bad that Mother Nature can throw at you. So I suppose it's the insurance section of the province that could guarantee that type of production.

It is also a guarantee that goes beyond that, because it's also the stabilizing factor that keeps our watershed management in tow, that we meet not only our own needs but those responsibilities we owe both to other countries and indeed to other provinces. Sometimes you can get a little lax if it just flows in a stream and no one makes any use of it. No one ever decides what comes out the other end because you've never had the responsibility, nor does something happen in the middle to bring it to your attention. Irrigation districts, I suppose, have made this province very water-conscious, as it has in other countries. We're fortunate in that as long as we can control the eastern slopes, which are our watershed, we'll be able to guarantee that type of production.

The amount of acres under irrigation at the present time, of course, can increase, and the only thing stopping us now is a guaranteed water supply in degree and amount. The future -- you'll find specialty crops that lend themselves . . . Technology can change. Who knows what kind of crops we'll be growing in a hundred years in irrigated areas? Of course new varieties -- we'll be taking some of the areas that we may be growing now in irrigated areas that will be elsewhere in this province. I think it's the greatest insurance policy we've got.

MR. PAHL: Just to supplement that if I may, Mr. Chairman. Would you accept the qualification or caution that not only do we need to be able to deliver water to specific acres, but we need to have a good appreciation of the capability of those acres, so that it's not simply a water delivery system? Appropriate to that, I suppose, would your Farning for the Future have insurance on your capital works projects into irrigation — would be a sort of 5 to 10 per cent allocation for research in that area? Is that a fair balance? I would question whether we would be continually just delivering more water to more acres without having the balance.

MR. SCHMIDT: First of all, the balance -- I would have to agree with you. As to where the funding comes for that type of research to decide if there is a balance. I don't think it should come out of the original \$90 million, because it's going to take all of that plus perhaps more to achieve what that amount was set aside for. There are other areas of funding for research that I'm sure we could take core of, leaving the basic fund separate.

One other aspect -- part of that million dollars that the irrigation districts are using is not in total. Some of them are doing some land evaluation, some work through land evaluation, land assembly, and I guess identification. It could be called research, if you wish. But it's tackling some of the problems you mentioned. It's been engoing and really concentrated this last year and a half, an indicator that there are now more in the field of taking a very close look and assessing what's available in each district: the best type of land that can be irrigated and the land that can be physically irrigated and that which should be irrigated because of its potential.

There is a certain amount of work going on at the present time. We're doing some mapping. We're helping them through this basic program of coming up with some aerial photography and land evaluation so that hopefully when we reach the time when irrigation can be expanded we don't have to stop and do the assessment them. It will already be completed. In the assessment they're doing there may be areas that are causing them problems now, where they find because of salinity or seepage it may be better to cut it off and put other land under irrigation to take its place.

So they're looking at many aspects, and I would have to say that the irrigation districts themselves are really dedicated and understand it from top to bottom perhaps far better -- they've been at it a lot longer than we have. It's certainly a pleasure to work with them, because they know the direction they're going, they recognize their problems and are quite happy to work with us.

MR. KNAAK: Mr. Minister, over the last several years I've developed an appreciation of the difficulty of starting and making a farm operation viable. One of the concerns I now have for all small business, and not just for farming, is the increasing interest rate, which is now I think at prime plus 2 at 15. I understand that the Alberta Agricultural Development Corporation by and large has as the majority of its expenditure guaranteed loans. I understand the bank will lend on this guarantee arrangement at prime plus 1, which still is an unreasonable burden, I think, for any young group of people starting out in small business, whether it's a farm or otherwise.

My question is: is the government considering reviewing its policy of increasing direct lending to farmers and reviewing its policy of making the Alberta Agricultural Development Corporation not a lender of last resort; in other words, increasing the scope of loans from that? Perhaps while you're thinking about that question I might as well ask my other one as well, if you don't mind, Mr. Chairman. To what extent have results come in from the Farming for the Future program? If you don't mind, could you just outline some of the experiments and research being conducted, and what possibilities they have for decreasing costs in the farming business. Maybe just a brief reply.

MR. SCHMIDT: Mr. Chairman, without moving into a completely new area, the Ag. Development Corporation -- I don't think this is either the time or the place to go into its complete operation. But in answer to your question, I would say yes, at the beginning of my responsibility in Agriculture I agreed to review all the programs available to see whether they are achieving the job they were intended to do. ADC is of course one of them. That's ongoing at the present time.

Now, back to Farming for the Future. Some indicators — there are many of them, but I'll give you some ideas of what types of programs are established under Farming for the Future. We've got apiculture; entomology, dealing mainly with outbreaks, forecasting, whether there's a system to forecast outbreaks of Bertha army worm, cutworm, this type of thing, better than what we have; in other words, a saving to all of those crops which those pests tackle. Bee-breeding program — the tentative allocations are \$150,000 to breed a superior bee for the Alberta climate. That of course is on behalf of the industry. Beef, dairy cattle, evaluation of rapeseed meal — its evaluation in regard to supplements as to lactating dairy cous, cattle adaptability to the feed itself. Complete review of forages, nutritive value of all forages, and of course some research in new forage aspects. Cattle

breeding efficiency, processing, growth and carcass research, evaluation of sulphur dioxide as a silage preservative. Under cereal and oilseed crops -original testing of some of the oilseed varieties themselves, field production, development of new technology for cereals and rapeseed itself. oilseed production, some new barley varieties, research in that area, improvement of rapeseed stands in the Peace River block, rapeseed breeding to examine the potential of new early-naturing Argentinian varieties, diseaseresistant varieties in regard to rape, early-maturing barley, research coming forward with barley that will meet some of the pressures -- temperature and rainfall aspects for parts of the province. White wheat variety being used in southern Alberta, forages, viruses, virus-related forage diseases, forage crops, brougham grass breeding, alfalfa improvement, silage, additives, techniques, red fescue, environmental factors, winter wheat, nitrogen fixing, zero tillage -- one I'm sure you're both aware of and interested in -- an evaluation to effect zero tillage on different soil textures, its evaluation through zero tillage, an evaluation of losses, changes of both ferilizer and soil nitrogen; nitrogen itself, its evaluation to develop ways of reducing its losses, fertility management, potato testing, protein yields in potatoes, greenhouse crops, various soil additives, herbicidesfor rotational crops; poulty, sheep, swine, rapeseed meal studies to cover all three of those; processing, transportation, marketing, rapeseed oil consumer aspects, refined products, farm management, field laboratory, communication between universities and farms. That's just a few of them.

MR. KNAAK: It's certainly extensive, Mr. Minister.

MR. SCHMIDT: Fair coverage. Of course they vary in amount from \$6,000 to I think \$150,000 -- in that range. They're not limited to amounts; its limit is to the degree. Those applications are accepted, presented to a board, screened, and the recommendations from the committee go to the full board and the full board either approves or disapproves. Those are some of them. They're ongoing at the present time. I don't have copies of all those that have made application for various research programs for this year, because its not completed yet.

MR. BORSTAD: Mr. Chairman, I'm just wondering how much land so far has been rehabilitated in the irrigation area from the heritage trust fund, and what capacity we have for increasing lands with the present headworks.

MR. SCHMIDT: To give you a rough idea, the summary of the assessed acreages—and the reclamation would be that land which has been brought under cultivation which wasn't under cultivation at the time of the program. In total, in 1977 we had 982,798 acres under assessment; in other words, being irrigated. In '78 that jumped to 1,005,823. So there's an increase of about 23,000 acres, as you upgrade. That of course takes into consideration two areas where we've taken out — perhaps in the study recommendation, as we've upgraded we've withdrawn 56 acres in the Raymond Irrigation District. So there's some out, and some up. But the total is an increase of just over 23,000 acres.

MR. BORSTAD: How much more can we increase with the present headworks?

MR. SCHMIDT: Oh, wow. I couldn't give you an answer, but extensive, I would have to think.

- MR. NOTLEY: Do we have the figures on the number of irrigable acres? We'd be looking at, what, is it 5 million or 6 million?
- MR. SCHMID7: In total throughout?
- MR. NOTLEY: Yes. That was the figure I had in my mind someplace, but I just want you to confirm it.
- MR. SCHMIDT: I'm not too sure if I have the figures here, Mr. Chairman, for the total. I'll keep thumbing through; I may run into them.
- MR. BRADLEY: I have some questions with regard to some of the earlier supplementary questions, particularly with regard to the recommendations in the Environment Council of Alberta report on the Oldman River. I don't know if the minister mentioned a time frame in which you or the department, the government, would be responding to specific recommendations, particularly the question of changing the funding formula from 86:14 to 75:25, the question of metering at the farm gate. Can the minister respond at this time as to when he anticipates being able to respond to those specific recommendations, or what thoughts he may have on them at this time? Have any discussions taken place with the Irrigation Council or the irrigation districts with regard to a change in formula?
- MR. SCHMIDT: It's difficult for me to give you an answer, Mr. Chairman, because the report is out on behalf of the Department of the Environment, which will set the time for the hearings and the evaluation. Hopefully the epportunity for both discussion and consultation from Agriculture will take place at that time. From our point of view, I would think an ideal timing would have to be some time before the end of, perhaps, February or early March, because we have to be involved if there are going to be some changes. We'd like to do some work in the suggested changes in the sharing formula. And of course we'd like to have the opportunity to sit down and discuss it with the irrigation districts as well, although I'm sure that because it appears in the report itself, we'll get an indicator fairly early, as each district makes its representations. So it's difficult; I don't know what timetable the Department of the Environment has set for the hearings and the reply.
- MR. BRADLEY: Further supplementary, again along the lines of some earlier questioning. There's been some discussion today about an 80 per cent utilization factor. That is a term used in the ECA report. I'm familiar with discussions held in the past with regard to water use efficiency. Is the term "utilization factor" the same as "water use efficiency"? It seems to ne there are a number of different terms you can use, whether it's "delivery efficiency" or "on-farm efficiency" or "irrigation efficiency". It could be quite confusing as to what level you'd like to get to in terms of water use efficiency, whether it's delivery -- one can think that when you look at overall water use efficiency, there's a great deal of evaporation in the reservoirs themselves. Is that included in this 80 per cent utilization factor? I would think it would be impossible if you took the reservoir evaporation rate into consideration in terms of overall water use efficiency.
- MR. SCHMIDT: Well, I agree that there are perhaps a number of different ways of approaching the same thing. I have taken it as being the utilization

factor ence the water is from the reservoir itself into the system; from there, through its utilization, until it's either returned. So I take it from a district that the factors we are using — and I would hesitate because I'm not too sure of the interpretation they're using in the total system. All I'm saying to you is that when I have been discussing utilization — or at least I haven't; I've been listening and the boards have been telling us what they consider is within their system. Because that's really the only one they have any control over: once it gets within their system. They're of course as anxious as we are. For every gallon they get, they want to get the best usage out of it. That's the utilization factor they're talking about.

I would hope that whatever utilization factor is described in the report, it may or may not be in that same vein. If it isn't, why then I should take a look at it and consider it when we're doing our report on that report. But that's my understanding of utilization.

MR. BRADLEY: There is a considerable amount of evaporation in the canals themselves, other than leakage. That would be a factor which would be difficult to overcome, unless one went to an underground piping system, which would increase that efficiency considerably. You were also suggesting that the return flows would be considered part of the utilization factor? Thank you.

MR. SCHMIDT: Mr. Chairman, just one other factor. Regardless of the application for some research of different methods of transporting water within systems, there has been a certain amount of ongoing research done by the districts themselves in the carrying capacities, whether it be pipe, open ditch -- wide-open ditch or narrow and deep -- taking into consideration evaporation, costs of transporting, the crossings, the total cost of weed control, this type of thing. Hopefully, with some further research, it may not be that drastic a change, I suppose, if we're considering the transmission of the main flows of water, closed pipe, I don't know. But these are factors they are studying at the present time, to spread the capital costs over a fairly long period of time, taking into consideration their normal operating costs to keep the system operating, plus the capital cost at the present time of upgrading, using concrete or plastic liners.

MR. BRADLEY: Further supplementary, Mr. Chairman. Would you hold the position that application efficiency would be taken into consideration in this overall water use utilization factor? I'm thinking that obviously different application methods have different efficiencies, whether it's flood, irrigation, or pivot irrigation, wheel move. Those would have to be taken into consideration. For example, I understand that trickle irrigation, in terms of application efficiency, is somewhere in the 96 per cent area of efficiency, but is not particularly practical or applicable to most of the crops under irrigation in southern Alberta. Would you therefore be looking at, through the irrigation districts, suggesting to farmers what type of application method they should be using to increase their efficiency?

MR. SCHMIDT: I think it would be a responsibility of both the district and, indeed, the farmers who make up the district that when that information is available, some heed would be made of it. I can't see a district getting that militant that they would tell the farmers exactly what type of system to have, because you're talking about a fair capital cost. You don't trade then off

like you do cars. It's like getting married; I think it's almost a lifetime proposition.

MR. MOTLEY: Hopefully.

MR. BRADLEY: I certainly appreciate that.

MR. SCHMIDT: There's some degree of longevity.

MR. BRADLEY: One of the suggestions that has been made is that if you're going to look at improving application efficiency, perhaps the best way of doing that is metering the water to the farm, then let the farmer himself decide as to -- he's been allocated a certain amount of water; it's been metered to him; he's been charged for it. Obviously if he's being charged on a metered basis for his water, he's going to use the most efficient method of application himself.

MR. SCHMIDT: That seems to be the philosophy or direction of the districts. And I would have to agree that's perhaps the most democratic and, indeed, the one that would produce the most results. Usually if you have to pay for something, you make sure you get value received. I would that's a good way to go.

Incidentally, the question that was asked in regard to the acres involved.

MR. CHAIRMAN: Mr. Notley's question.

MR. SCHMIDT: Mr. Notley, the total acres that fall within irrigation districts in the province are about 3.3 million. The potential that's inside the districts at the present time is about 354,000 acres. The potential adjacent to the districts, but not part and parcel, is about another 750,000. If you want to go well outside, the potential could be as high as 3,750,000. So the potential is fairly great, compared to the 354,000 acres now.

MR. CHAIRMAN: Mr. Clark, is your question a supplementary?

MR. R. CLARK: No.

MR. CHAIRMAN: If not, I have a long-standing supplementary from Mr. Stewart, followed by a supplementary from Mr. Pahl.

MR. STEWART: Thank you, Mr. Chairman. I've listened with interest to the discussion on irrigation, because it's something I don't have a lot of knowledge about. But I think that when we look at agriculture, for which you're responsible for the whole province, there are many ways we can upgrade our potential agricultural production, and the heritage fund is a likely source of funding.

But as one who has been involved in agriculture in another part of the province. I think we've got to look at a ratio of return for investment, because not all people in agriculture are going to get the opportunity. Consequently, when you talk about rehabilitating a natural resource that we have today, we've got to look at a fair return to the rest of the people of Alberta for the investment we make, as well as the opportunity for the people who are directly involved. I think that as you go to other parts of the province where we have drainage problems, also where we've got Crown land that

will hopefully be upgraded, we should be looking at a relative return, both to the person who has the opportunity to use it and to the people of Alberta for any money we expend. I think that programs that will enhance our position in agriculture to make us a greater producer of the things we have a market for — and when I think of this I look at our beef production in this province. While we were 40 per cent of Canada's production, Canada is still not self-sufficient in beef. The opportunity for expansion in this field is a market that we do not have to create; it's already there. We should be making every effort to have first-hand information on the best ways of expending the province's money to enhance the production of products we have a market for.

I believe that for the people in the irrigation district -- it's a very complicated technique of agriculture with which I'm not too familiar. I'm sure a lot of research is being done by the people closest to it. But I think when we look at the total agricultural picture, we should be thinking about expanding the opportunities we have in production where there's a local demand, where we do not need to seek an overseas market for the product. For this reason, I believe that our opportunities of expanding on Crown land in the northern parts of this province and in the western parts and the parkland areas -- that there's a great opportunity for heritage money to be invested where it will show a return. I think that the research your department can do to lead the way in any operation of this nature will be very valuable to the agricultural industry, as well as the rest of Alberta.

MR. SCHMIDT: Mr. Chairman, with your permission I would like to pass on a few comments with regard to the hon, member's comments on agriculture in general. We've been discussing irrigation because it's part of a particular program that falls under the Heritage Savings Trust Fund, and I would have to agree that in this area we're discussing a dry farmland area which is enhanced by the use of irrigation, which has affected production in a very positive way.

But with your permission to speak in a very general way, there are areas where the expenditure of funds, in reclamation, if you wish to call it that, in drainage, in the increase of carrying capacities by upgrading or improving bushland at the present time, in the reclamation of scrub and bringing it through tame grass to put it into production, I would have to agree with the comments he made: there are many ways to enhance not only the agricultural potential but the production amounts within this province. We haven't touched the basic potential we could be faced with.

Any expenditure of funds, whether they be public funds, in any area of this province to enhance production is, to me, just increasing the capital asset of this province. Then of course our net worth as Albertans becomes even greater, to say nothing of the contribution that could be made if necessary because of production in the world market itself. So irrigation is one; that balance has to be maintained. We're fortunate, I suppose, in that we are looking and have the opportunity to assess the number of acres that happen to have too much water, and what would happen to some of those areas if they were drained, their potential from an agricultural point of view. We're well aware of the areas that we know have an abundance of poplar; when it's removed, of course, they become productive. So irrigation is just one of the areas where public funds are being expended, and under discussion this afternoon. There are others, indeed to the benefit of agriculture and the province.

MR. PAHL: Mr. Chairman, I wanted to ask a supplementary that really has been uell covered. But I will take the opportunity if I may, sir, while I have the floor to acknowledge the presence of Members of the Legislative Assembly of

New Brunswick and their standing committee on renewable resources. I had the pleasure of joining them for lunch, as you did. I just wanted to acknowledge their presence for others members of our Assembly, and indicate that it's appropriate that they walked in now, because we are dealing with a very important renewable resource in Alberta, notwithstanding our dominance in oil and gas.

MR. R. CLARK: Mr. Chairman, I'd like to direct a rather brief question to the minister. Mr. Minister, when the Member for Edmonton Whitemud asked the question with regard to the Agricultural Development Corporation, I think you said you felt this wasn't a very appropriate time, perhaps, to become involved in that area. In light of the fact that the Agricultural Development Corporation now appears in the annual report, Mr. Minister, I wonder if you'd spend a moment or two and explain to the committee what kind of review of ADC you now have going on.

MR. SCHMIDT: Mr. Chairman, very briefly, ADC provides funding in two particular areas: an agricultural lender of last resort, that of course depending upon the applicant and the form of the loan, either in direct lending or government guarantees. The other major field which is indeed of great concern to me is the beginning farmer aspect. That in itself really is a last-resort lended as well.

The question one has to face is, first of all: do we, either as government or as Albertans collectively, have an obligation to agriculture in making money available to beginning farmers? If we do, what degree? If they are to become successful because of the rising cost of land, interest rates, machinery, livestock -- just the general cost of operating a farm has indeed risen to the point that to what degree does one subsidize? If so, how far and how long? In other words, to get a beginning farmer established on a farm sufficiently large to provide him a livelihood, and at the same time to assure that he has the opportunity to stand on his own two feet before you leave him on his own: those are factors we are presently considering.

At the present time, loans are made and the degree of the subsidization, if you wish to call it that, is done through an interest and is truly dependent on the individual parent. So it boils down to the fact that if your parents are reasonably successful, or if you have a parent who has a farm holding, your chances of being accepted as a beginning farmer are indeed less. And if you're accepted, it's at least not on par with the chap who has just the oppositel, either no parent or a parent who has no viable interest in agriculture or who may not be financially fixed to the point that they would consider the father as part of the application.

So we have a differential there, and I think it's the feeling that if you're going to deal with beginning farmers, you should deal with beginning farmers; look at the individual as an individual. Tackle the problem from there, not because of his parent. If you look from the parents' point of view, most of them would be in that very young age of 50 to 60; some may be retired. I don't think it's fair to tie them financially. They've been tied financially one time or another all through their lives, and they're perhaps just in the position where they're free now. I don't think you should ask them to tie themselves financially to start junior. What happens if you have four juniors and three daughters and two sons-in-law? Where do you draw the line?

So those are questions we've been asking, and of course they're going to require some answers. The degree of subsidy is another factor; for how long. There are many ways of doing it. You can't enter the market place and change

the face of the market place. You have to accept what's out there. If you want to subsidize them, there are other ways of subsidizing the youngster.

I call them youngsters; what does "beginning farmer" really mean? Does it start at 18 and quit at 24? I think it's a fact of life that there are more people going back to the farm new who fall closer to age bracket of 26 to 35, people who were born and raised on the farm, who have left at an early age and gone out into the world, into industry. They are now reasonably responsibly people with some commitments, usually married; in many cases they have some funds set aside. All of a sudden they decide they would like to go back to the farm.

So I think that if there are limits, they have to be broad. I think the limits in total have to be broad, and the total paskage. In other words, if you limit the total amount — you either qualify or not if your application falls within that. There's a terrific difference between a young lad coming with a complete parcel to walk on, a half-section dairy farm, where the individual will leave everything, cows and all — and that total price may of course outlaw him from making an application. I don't think that should be the case. I think there should be that flexibility; in other words, no limits. Take them on their own merit.

Getting back to the last aspect, in all due respect, the question is: lender of last resort. I don't know how long. Is it a field that one should be in and, if it is, should it be true last resort and last resort only; in other words, nothing in between. It's either straight loan or loan guarantee or straight guarantee. Because you have exactly the same thing; you have people in the industry. The philosophy is backwards. If there's a great degree of risk in normal lending institutions, your interest rate would indeed be much higher; the philosophy as a lender of last resort is that it's lower. So you have people in the industry who both approach the bench, so to speak, both walk away, but not at the same interest rate. So those are factors that I guess govern the lending. It's the degree, to whom, for how much, and for how long. They're under review. I don't know if that answered your question.

MR. R. CLARK: It's a good step in that direction, Mr. Minister. I'm pleased with the scope of the review that is being looked at.

Mr. Minister, the inevitable question, then, is: when would you expect to be in a position where this review is finished? Is it something you're doing yourself? Have some consultants been brought in? What kind of time line are we looking at?

MR. SCHMIDT: Well, I had the pleasant task this summer of presenting the beginning farmer paper in New Brunswick to my colleagues, ministers of agriculture across Canada. Incidentally, to our guests: I enjoyed my stay very much. Thank you, you're terrific hosts.

I would like to wait because each and every province, of course, has the same problem. They differ because of provinces and, indeed, philosophies change. Collectively they have some material that's on its way now. We are doing some work ourselves in regard to the total review. I would think that collectively the majority of the review will be internal, and hopefully I would say by -- I hate setting guidelines -- the end of this year we should be well on our way with some change, decision-making with regard to the areas and direction we should be going.

MR. R. CLARK: Thank you very much.

MR. CHAIRMAN: There appear to be no further questions of the minister. On behalf of the committee, sir, I'd like to thank you for appearing before us today. I'd like to remind the committee that we next convene on Monday morning at 9 o'clock with the Minister of Transportation.

The meeting adjourned at 3 p.m.