

[Chairman: Mr. Kowalski]

[2 p.m.]

MR. CHAIRMAN: Good afternoon ladies and gentlemen. Perhaps we might convene. We have the Hon. LeRoy Fjordbotten, Minister of Agriculture, and Mr. Nigel Pengelly, who is a representative of the Farming for the Future project, appearing before us this afternoon.

Committee members will remember that a year ago when the Minister of Agriculture was here, he gave us a rather impassioned request to ensure that the annual report the following year would highlight the projects of Agriculture that are funded by the Alberta Heritage Savings Trust Fund. I'd like to draw to the attention of all committee members pages 8 through 11 of the Provincial Treasurer's annual report and specifically note those projects that come under the responsibility of the Minister of Agriculture. Specifically, we have the Alberta Agricultural Development Corporation. You'll note that investments as of March 31, 1985, total \$955 million. Investments under the irrigation rehabilitation and expansion project, as of March 31, 1985, total \$152 million. The Food Processing Development Centre investments, again to that same point in time, total \$7 million, and Farming for the Future investments, to March 31, 1985, to \$30 million. The report also indicates what the expenditure levels were in the fiscal year 1984-85.

Mr. Fjordbotten and Mr. Pengelly, welcome. Perhaps the Minister of Agriculture would like to provide members with an overview statement.

MR. FJORDBOTTEN: Thank you very much, Mr. Chairman. I'm pleased to appear before the select committee to report on the heritage fund projects which fall under the Agriculture portfolio. I'm also pleased to have Nigel Pengelly with me, who is the MLA who sits on the Agricultural Research Council. I thought it was important that Nigel have the opportunity to be here today and speak to any specific projects you might be interested in.

Mr. Chairman, as you pointed out in your invitation, most of the committee members were here — this is my third review of the heritage fund projects for which I'm responsible. Therefore, unless requested to do otherwise, I'll supply the background

information only where necessary and will largely restrict my opening comments to developments which have occurred since my last appearance before the committee 12 months ago.

Mr. Chairman and members of the committee, as the Chairman outlined, there are four basic programs supported by the Heritage Savings Trust Fund which specifically relate to the Department of Agriculture. The first of these is Farming for the Future, which, I'm sure the committee is aware, is Canada's largest provincial program for agricultural research.

The second program is the establishment of the Alberta Food Processing Development Centre, located at Leduc. The centre was officially opened last December, and there are a number of products on the table here that I asked to be brought in today to give you some idea of some of the products the food lab has been involved in to this point. This is by no means all of them. Some of them, of course, are commercially confidential, working with different companies. Just a small, representative sample of what they are is before you today. Also, there's a picture of the Leduc food lab off to my left. I'm sure that will create some interest in some of you. As you know, the lab is operational and in the process of purchasing and installing equipment, and that equipment is going to be coming in continuously, probably through '86-87.

In the third program, irrigation rehabilitation and expansion, my department is specifically involved in upgrading the irrigation canals and ditches and in other works which do not involve headworks or major structures. The fourth program is the provision of funds for farm credit extended through the Alberta Agricultural Development Corporation.

Mr. Chairman, in general I'd like to note that all these programs, in addition to providing major assistance to primary producers, have played a significant role in furthering the value-added food products in Alberta. As the government has repeatedly emphasized, value-added processing and improved marketing are both key ingredients in the future economic success of the province. Even while the industry is fighting to make its way through one of the toughest periods on record for primary producers, we must keep in mind the importance of our secondary sector. At this

point, I think we have to remember that that sector is equal in economic value to our primary agricultural industry, and it provides employment for hundreds and thousands of fellow Albertans. Providing people with jobs and helping safeguard those jobs is certainly a major aim of these agricultural programs, just as it is a goal of all the programs funded by the Alberta Heritage Savings Trust Fund to provide Albertans with the best quality of life possible.

The first one I'd like to give a fairly full overview of, because it's had a lot of activity during the course of the last year, is the Alberta Agricultural Development Corporation. As committee members are aware, the agricultural industry in our province is in transition, just as it is across Canada and around the world. Like the rest of the world, we are emerging from our longest period of sustained economic growth and inflation ever known. There can be no doubt that this has resulted in financial difficulties for some of our producers. Given the lower grain prices and uncertain economic conditions which have been forecast, the coming fall and winter will be a busy period for many farmers. In coming months, they and their lenders will be attempting to work out solutions to some of their long-term debt commitments. Moreover, the cash needs of farmers in general are really growing. The main reason for this is a greater dependence on expensive, purchased inputs, combined with larger debt loads.

Given the fact that the current debt load in Alberta is expected to increase, it's understandable that demand for farm credit has really never been greater. In fact, over the past decade the outstanding agricultural debt in our province has increased more than fourfold, from \$1.2 billion in 1972 to \$4.9 billion in 1983. Those were the most recent figures I could get on the total debt.

Mr. Chairman, there can be no doubt that the Agricultural Development Corporation has played a central role in servicing the needs of agricultural credit in Alberta. The corporation, as you all know, provides a wide range of services, including direct and guaranteed funding, to meet the long-, intermediate-, and short-term needs of Alberta farmers and agricultural processors. I think producers in this province look to the Agricultural Development Corporation as a reliable source of long-term loans at reasonable interest

rates. It's now in its 13th year of operation, and ADC has become one of our province's largest agricultural lenders. As of July 31, 1985, the corporation had almost 26,000 active and outstanding direct and guaranteed loan accounts, totally \$1.2 billion.

A good percentage of these accounts consist of beginning farmer loans. Mr. Chairman, I think I can state without reservation that without ADC many young Albertans would have been barred from starting up a farm in our province. Since 1972, 6,400 loans, together with more than \$862 million, have been approved for beginning farmers. That's an incredible record. As of March 31, 1985, over \$122 million had been paid out in incentives to holders of these loans. In 1984 alone, these incentives amounted to \$37 million.

The benefits which have occurred to loan recipients, both financially and in terms of opportunities gained as a result of these interest reduction incentives, are unquestionable. However, some concern has been expressed regarding the impact of moving to higher interest rates after the incentives run out. To address these concerns, steps were taken last November to cushion the blow, so to speak, for beginning farmers and party borrowers whose five-year interest renewal comes due prior to April 1, 1987. Interest rates will be set at 9 percent for the sixth and seventh year of the loan, and the cost of providing this extended assistance is \$19.4 million.

Mr. Chairman, there have been a number of other changes and improvements to ADC's policies and programs since I last addressed the committee. Credit really is the key to being productive and efficient in the agricultural industry, but credit must be properly managed. In recent months, the rapid escalation in the use of credit has left many farmers struggling to cope with a new frontier in farm management. As a result, it was realized that for some, extra assistance in farm financial management was really needed. To meet the needs of those producers, ADC established its enterprise counselling program in January this year. Through that program 60 experienced, knowledgeable producers throughout Alberta are available to work on a one-to-one basis with farmers experiencing financial difficulty. This program has helped to improve relations between farmers and their creditors and has

assisted in developing debt workout plans in solving financial problems. You may be interested to note that to date 268 farmers have taken advantage of that counselling program. The enterprise counselling program is specifically concerned with farmers in financial difficulty. However, as you know, Alberta Agriculture also provides individual financial counselling and management, intensive training courses, and on-farm accounting assistance.

To return to the corporation's lending activities, ADC introduced a farm development guarantee program last year, which provides special assistance to farmers particularly hard hit by the current cost/price squeeze. The program offers up to \$100,000 in new operating capital in situations where the farm has potential to return to viability. Under the farm development guarantee program, farmers who cannot obtain necessary operating credit elsewhere may apply to ADC for a guarantee of new operating loan advances from a commercial lender at the bank prime rate, provided that the borrower accepts counselling and is able to provide a debt workout plan. To date, 72 farm development guaranteed loans, totalling \$3.5 million, have been approved. This program, along with the enterprise counselling program, has acted as a catalyst to help farmers and their creditors to reopen communication and begin to work together to solve their financial problems through regular lending programs. Mr. Chairman, I think any move which fosters better communication between these two groups must be considered a success.

I'd like to emphasize to committee members that during the past year ADC has placed a high priority on the maintenance of family farms through financial restructuring. For example, in the last four months alone, 898 amendments were processed for the corporation's approximately 9,500 direct and specific guaranteed loan accounts. These amendments relate to areas such as postponement of payments, release of security, or other changes in loan terms, which are often necessary in restructuring a borrower's finances.

Mr. Chairman, you may recall the initiatives I announced last year which ADC had taken to improve farmer access to operating credit and to improve cash flow. These initiatives supplemented the options already available and included changes in the corporation's re-amortization policy and the availability of up to

\$100,000 in trade debt consolidation under the AFDL guaranteed loan program operated through the banks. They had fixed-rate AFDL financing and specific guarantees for small business bonds.

By pursuing these options, 146 farmers in the province have received a total of nearly \$6 million in financial assistance. I would note, however, that these options weren't a means to solve all of the difficulties created by the cost/price squeeze. They're simply an expansion of ADC's already comprehensive lending program. Through this program, \$123 million was provided in the form of 1,048 direct and specific guaranteed loans during the fiscal year '84-85, and a further \$81 million in bank loans were guaranteed under the AFDL plan. In the first four months of the current year, 489 direct loans and specific guarantees were authorized, amounting to \$49 million. In addition, 2,742 loans, totalling \$42 million, were issued under the AFDL program.

Mr. Chairman, I would also like to draw your attention to changes made in the beginning farmer program in response to changing economic circumstances. Beginning farmers are no longer denied their interest incentives if they exceed off-farm employment criteria, so long as they continue to actively farm the assets mortgaged to the corporation. This revision applies to loans approved prior to March 30, 1984. For loans written since that date, the level of off-farm employment does not affect incentive eligibility. In addition, changes that were made this year were introduced to staging of loans under the beginning farmer program, to encourage planned farm development and prudent expenditure of funds. Beginning farmers may now draw down loans in three stages over six years as opposed to the previous limit of two stages in four years.

Mr. Chairman, in line with the government's white paper on the economy, which stressed increased domestic processing of Alberta farm products, interest incentives for agribusiness were introduced through ADC in 1985. On March 1, 1985, the corporation's agribusiness borrowers became eligible for incentives which reduced the interest on ADC direct loans. The interest rate reduction is the lesser of 3 percent or the reduction necessary to reduce the direct loan interest rate to 12 percent. The incentive applies to a maximum loan of \$500,000 for

direct term loans made to the corporation. For existing loans the incentive is effective for a five-year period ending February 28, 1990. For new loans, the incentive will apply for the first five years of the loan.

I think it's plain to everyone involved in the industry that events of the past 12 months have taxed the resources of farmers and agribusiness. Drought conditions, uncertain markets, and many other factors have taken their toll, and it's good to know that the Agricultural Development Corporation is working to assist farmers in circumstances which, in many instances, are beyond their control.

No one should have any mistake that ADC is a high-risk lender; it takes risks that no other lender will accept. The corporation recognizes that as a result some failures are inevitable but strives nevertheless to maintain its good record. As of July 31, 1985, 9.6 percent of ADC's accounts were more than one year in arrears. That compares with 7.8 percent in arrears last year. The total dollar amount of those arrears represents less than 3 percent of the corporation's total outstanding debt. Legal actions initiated in 1984-85 involve only 132 of ADC's direct and specific guaranteed borrowers and 41 AFDL borrowers, out of a total of 26,000 accounts. That's a very small figure.

I emphasize once again the central role played by ADC in meeting the credit needs of Alberta producers. I'm sure that members of the committee realize that the present economic circumstances are not limited to our province. On the contrary, they're a national and international phenomenon, and their underlying issues such as fiscal, trade, and monetary policies are all having an impact.

I would remind the committee of Alberta's participation in a federal/provincial task force on agricultural finance, which was established one year ago. The report of this group was considered by the federal Minister of Agriculture last fall, and a number of short- and long-term approaches to the finance situation were considered. In this regard it's notable that the Farm Credit Corporation is currently reviewing its role, and I personally continue to place a high priority on working with the federal minister and other ministers of Agriculture in this important area. I know there's room for the federal government to address this issue much, much further than they

are.

Our government has emphasized programs to augment the revenue flow to farmers, rather than relying solely on credit to try to solve cash flow difficulties. I believe that's positive. I believe that's a balanced approach which deals with more than just the cost and supply of agricultural credit. Over the next two years Alberta farmers will benefit from cash injections totalling more than \$450 million from various assistance programs, and I think that's an indication of the commitment there is to agriculture.

In closing on ADC, I'd like to point out that it's incumbent on the banks as well, and other financial institutions, when they're formulating their lending policies, to recognize the potential of agriculture. Those institutions must consider the long-term direction of the industry. It's really not that negative. The long term looks strong, but we have to plan accordingly. Time has proven that as a supplementary lender the ADC is an efficient and effective vehicle for meeting the unique credit needs of Alberta producers, especially those of beginning farmers and of farmers in financial difficulty.

The corporation's staff and the board of directors and enterprise counsellors have worked tirelessly to accommodate members of the farming community in need of assistance. I'd like to acknowledge their service to the industry and that of their chairman of the board, Harold Hanna, for the excellent work they're doing above and beyond the call of duty. I hope it's made clear that in maintaining and enhancing the services of the Agricultural Development Corporation, we must continue to look at it as a priority. I hope the committee will continuously support this valuable program.

I'd like to make a few remarks about the irrigation rehabilitation and expansion program. I'm sure you're well acquainted with that program. It's dedicated to the maintenance and improvement and expansion of Alberta's irrigation systems. Its ultimate objective, together with its sister program in Alberta Environment, irrigation headworks and main irrigation system improvement program, is really to provide a system capable of supporting 1.5 million acres of farmland under irrigation.

I'd like to briefly review the history of this initiative at this time. The irrigation rehabilitation and expansion program was first announced in 1975 and was implemented in

1976. In 1980 it received a second mandate, with new funding, which extended it to March 31, 1985. On expiry of that mandate, a total of \$152 million had been spent by the province and \$23 million by the irrigation districts under the province's cost-shared plan to upgrade and enlarge Alberta's water carrying facilities.

In 1984 the program's funding level and its cost-shared formula were extensively reviewed. To assess the feasibility of a third mandate, Alberta Agriculture and the irrigation districts undertook major studies through the Alberta Irrigation Projects Association, which established the benefits of the program and how such benefits are shared among various sectors of the province. As a result of those studies and other evaluations, it was concluded that the extension of the irrigation rehabilitation program would generate significant benefits for the farming sector and for the province as a whole. Consequently, in October 1984 I was pleased to announce a third term for the program, with funding of \$150 million over a five-year period beginning April 1, 1985.

The structure of the original program had been largely retained in the new mandate. The original cost-shared formula, whereby the province provides 86 percent of the project funding and the irrigation districts 14 percent, remains an appropriate one, and it's still in use. I'd like to note that the districts obtain their share of the needed funds through a levy on their water users, which on average totalled \$4.30 per assessed acre in 1984-85. In addition, the districts must provide any land that is required for the project.

Projects are implemented under the program in the following manner. The irrigation districts annually submit proposals for rehabilitation projects to the Irrigation Council. Once approved, these projects become the subject of cost-sharing agreements between the Minister of Agriculture and the district in question. These agreements outline specific terms and conditions for the expenditure of funds, and these expenditures are monitored by the Irrigation Council while the work is in progress.

Project engineering is the responsibility of the irrigation districts and is accomplished by district staff or by consulting firms. Overall planning and report evaluation and project monitoring during the construction phase is conducted by the irrigation and conservation

division of Alberta Agriculture. In addition, the department's resource planning division monitors construction to ensure that engineering standards are maintained.

Typical projects conducted under the program include upgrading and enlargement of canal systems, structure replacements, drain installations, small reservoir construction, relocation of canals in accordance with legal boundaries, seepage control measures, and installation of water control and measurement devices. The actual operating costs of these projects, both during and after completion of the rehabilitation program, are entirely the responsibility of the irrigation districts. Therefore, there are no operating cost implications for the government of Alberta.

In 1984-85, program support from the heritage fund totalled \$25 million. Of this, approximately \$24.8 million was distributed as grants to the irrigation districts, and a total of \$177,000 was allocated for support services. Of this support funding, \$52,000 went to the irrigation-related research projects, and \$125,000 was allotted to a long-term, aerial orthophotography project, which was completed during the fiscal year. I didn't know if I could get that word out or not; it has more words than marmalade.

The latter program has provided valuable topographic information needed for future planning and design in irrigation development. The research projects were conducted in conjunction with Farming for the Future as part of the research program established in 1982. Research conducted under this program to date has included studies on subsurface drainage, canal linings, use of wind turbines, evaluation of cut-off curtains, and testing of flexible liners.

During the calendar year 1984, 16,149 acres were added to irrigation district assessment rolls, to give a total of 1,124,000 assessed acres for the province as a whole. This represents an increase of 229,000 acres or more than 20 percent in Alberta's assessed irrigated acreage since the irrigation rehabilitation program was implemented in 1976. The program's budget for 1985-86 is \$30 million, which represents an increase of \$5 million over its level last year. Of this \$30 million total, \$29.8 million has already been distributed to the irrigation districts. The remaining \$200,000 has been allocated for research projects under the program I mentioned a moment ago.

Research projects in progress in the current fiscal year include land reclamation study, shallow bedrock study, monitoring of solonchic soils, and downstream control of automatic check structures. I note that the information gained from these projects is extremely useful to the Irrigation Council in their evaluation of the projects. The irrigation rehabilitation expansion program has entered the first year of its renewed mandate, and it certainly proves that there is an effective need for water management in the province.

In conclusion, Mr. Chairman, I'd like to emphasize that the benefits of the irrigation rehabilitation expansion program in Alberta are unlimited. According to the rehabilitation program study which the Irrigation Projects Association conducted, 4,700 new jobs and an additional \$336 million in economic activity for Alberta would be generated if we continued with the program. Most important, the report estimated that over 1,800 jobs and \$206 million in new productivity would become permanent parts of our economy. I hope everyone on the committee agrees with the importance of that program's continuing in the future.

I'd like to make a few remarks now about Farming for the Future. It's one of my favourites. It's a good-news subject. We have in Alberta, I think, one of the most innovative and creative agricultural research programs anywhere in Canada. Indeed, if you had to characterize Farming for the Future in one word, that word would be "co-operative". Farming for the Future does not actually conduct any scientific research. It only offers support. Therefore, to be successful the program depends on co-operative efforts of producers and producer organizations and private-sector agencies, academic associations, and government. We've received exceptional co-operation so far in the program, and we're reaping many rewards today. Our level of support really is one that I think has proven through the years to be — this is one program that is just really exciting.

Between 1979 and '80, when Farming for the Future officially commenced, and the current year there has been almost \$31.3 million awarded to 337 research projects. The on-farm demonstration program was started in January 1982, and in three years, to January 1985, this program has awarded \$723,000 to 170 projects.

The rate of return on public investment in

agricultural research is very high, in the range of 40 to 200 percent. Some say that it can easily reach 100 or 1,000 to one. If we go back to the white paper, I think it clearly stated the Alberta government's proposal to intensify the research and develop activities in agriculture and other areas. I think that money is extremely well spent.

Before I continue with my remarks on the last subject, the Leduc food lab, I'd like to have Nigel Pengelly make a few remarks about the Farming for the Future program.

MR. PENGELLY: Thank you, Mr. Minister. Mr. Chairman, members of the committee, I'll give a brief overview of the Farming for the Future program.

Agricultural research is a long-term, often painstaking undertaking that can provide outstanding rewards if you have the commitment, the resolve, and the resources. As the minister has noted, the rate of return on agricultural research is very high: three, seven, even 40 to one, according to the reports of some organizations, with the returns on some commodity research even higher. It is through research that our agricultural sector prospers, as well as the secondary and tertiary industries dependent upon it.

The research program is the largest of Farming for the Future's two funding vehicles. For 1985-86, the research program has awarded \$4.8 million in support of basic and applied research in nine major areas. Many research program projects have produced significant benefits. For example, one project resulted in the licensing of a new, high yielding, early maturing barley bred specifically for the Peace River region. Studies concerning crop utilization of nitrogen have generated recommendations which could save the Alberta agricultural industry millions of dollars in fertilizer expenditures each year. Two strains of the Alberta bee have been developed to suit Alberta conditions. The bees are disease-resistant and overwinter well. If they perform as well for commercial people as they did under the test conditions, honey production could increase substantially in the coming years.

Farming for the Future helped support testing of a new vaccine against calf scours, a disease which costs Canadian livestock producers millions each year. New soybean and safflower varieties have been developed, giving

Alberta producers more options in the choice of crops suitable to their growing conditions. An improved method of packaging the bakery product has extended the product shelf life, allowing stores to keep it on shelves instead of in freezers. This has actually enabled a Calgary business to expand its production fourfold.

Mr. Chairman, for 1985-86, the research program of Farming for the Future awarded moneys in the following categories: \$654,392 for cereals and oilseed projects; \$427,000 for crop protection and entomology projects; \$339,965 for forage research; \$215,800 for irrigation projects; \$789,281 for land resources and engineering projects; \$424,178 for nonruminant research; \$576,705 for processing, transportation, marketing, and socioeconomic projects; \$1,000,132 for ruminant projects; and \$266,356 for special crops research.

Mr. Chairman, Farming for the Future's other funding vehicle is the on-farm demonstration program. Its role of accelerating technological transfer is essential for progress in Alberta's agricultural industry. The positive results from agricultural research are beneficial only if they are adopted by the farming sector. On-farm demonstration has proven to be one of the best means of communicating new technology and encouraging its adoption. On-farm demonstration projects combine the practical know-how of the producers, the scientific knowledge of researchers and specialists, and the extension skills of district agriculturists. Producers are introduced to the latest innovations, and specialists become more aware of the needs and problems of producers.

The on-farm demonstration program supports a wide variety of projects across Alberta. One project showed that confining ewes to raised stalls at lambing time can reduce lamb mortality and the amount of labour required to look after lambs and ewes. Another project found that a modest investment in some innovative cultural practices can greatly improve vegetable yields in the Fort McMurray area. Several projects have involved the introduction of the superior Alberta bee. A calf scours vaccine developed under the research program was tested in another project.

Mr. Chairman, the on-farm demonstration program has proven to be an effective method of technological transfer. This type of communication link between researchers and producers is crucial for the growth and success

of Alberta's agricultural industry. Because technological transfer is so essential, we are proposing that the on farm-demonstration program's annual allocation be raised from \$400,000 to \$600,000. We have already seen excellent results from this program. Increasing its allocation should benefit our agricultural industry even more.

Farming for the Future has shown itself to be a sound investment in developing a prosperous future for Alberta's agricultural industry and for the province as a whole. I believe it is vital that we continue to support agricultural research so that the challenges of the future can be met.

Thank you, Mr. Chairman.

MR. FJORDBOTEN: I'd just like to make some brief comments about the Food Processing Development Centre. I know most of you have had the opportunity to visit there and to see some of the projects that are under way.

As you know, it is a development facility committed to the advancement of food processing in Alberta. It was officially opened in 1984. It has the best equipment and the most modern facilities anywhere in Canada. The centre represents a major step in the development of our food processing industry because it offers a comprehensive package of support services to Alberta's processing firms.

Through the facility, pilot-scale equipment is made available to simulate full-scale processing of meat, dairy products, oilseeds, and prepared foods. Experienced scientists are on hand to provide expert advice and assistance on every aspect of food production and marketing. The building houses an advanced and well-equipped lab for product development and testing evaluation. The wide range of support is allowing Alberta's food processing firms, both large and small — and I emphasize "small", because I think they're the ones that can really utilize this facility. It's helped them to create and market new food products which are uniquely suited for production in the province and which also have national and perhaps international appeal.

In addition, the centre is enabling firms to improve their existing processes so they are better adapted to production and supply conditions in Alberta. By helping to develop the most appropriate products and processes, the centre is enabling our food industry to become

more competitive in the provincial, national, and international marketplaces. In this way the centre is creating a market alternative for our agricultural production, thereby also creating employment opportunities for Alberta residents.

The Food Processing Development Centre was approved by the Legislature in 1981-82, and construction was completed at the Leduc industrial park in the fall of '84. In spite of a number of unfortunate construction delays, the total completion budget for the facility remains unchanged at \$8,861,000. Approximately \$1,275,000 of this sum has been reserved for future purchases of equipment and specialized services for the centre. We've requested a one-year extension for those purchases so that we can take advantage of some anticipated new technical improvements in equipment. I emphasize that this extension would in no way increase the total cost of the completed facility, which remains at a level approved more than two years ago. However, the deferred purchases would enable the centre to better meet the requirements of its clients in the months ahead.

The centre employs a total of seven professional and support personnel, and since the official opening of the facility the staff has received some 130 requests for technical information and assistance from small businesses and corporate sectors. In response to these requests, the centre's product development section has assisted various firms in areas of concept design and evaluation, ingredients source, formulation capability and suitability, packaging system assessment, accelerated shelf-life assessment, and sensory evaluation.

In suitable cases the process engineering section has also provided assistance, and the pilot plant has been employed to produce limited quantities of product for consumer or market testing. The flexibility of the pilot plant equipment, which is now approximately 80 percent functional, has already been demonstrated in a variety of projects. These include meat processing, continuous cooking and packaging of salad dressings, and the semicontinuous berry extraction and jelly-making. In addition, pilot facilities have been used to demonstrate the suitability of certain equipment and processes for processor needs.

I'd like to note, Mr. Chairman, that the centre staff emphasizes the use of Alberta raw

materials and Alberta suppliers whenever appropriate in their product development work. As a result, a number of Alberta-made products are being marketed which have the potential to replace imported goods in the domestic market. This is very much in line with our policy as laid out in the white paper and the recently approved strategy for increased market share of this new project, that I announced just recently, which is a joint initiative of Alberta Agriculture and the food processing industry.

I also note that as part of the effort to provide the best possible information and services to its client, the centre works closely with the department's market development division. Centre staff also maintains close contact with other related institutions, such as the protein, oil, and starch plant in Saskatoon, the Alberta Horticultural Research Centre at Brooks, Agriculture Canada, and a number of universities. In addition, the centre has received visitors at this point from Germany, Holland, United Kingdom, Australia, Brazil, Japan, China, and New Zealand. Those are just a few of the people who have come.

That concludes my remarks, Mr. Chairman, on the Food Processing Development Centre. I'll be happy to respond to any questions that may be asked.

MR. CHAIRMAN: Thank you, Mr. Fjordbotten and Mr. Pengelly. We'll proceed in the following order: Mr. Speaker, to be followed by Mr. Gurnett, Mrs. Cripps, Mr. Hyland, and four other members.

MR. R. SPEAKER: Mr. Chairman, first of all to Mr. Fjordbotten. I appreciate the report today. I think that was well-done and certainly I as a member needed that update and all that information.

My question is more on the future in terms of the use of the heritage fund. Some of the colleagues of the hon. minister have been making pronouncements across the province in terms of promising a billion dollars from the heritage fund, that we should have fixed-interest loans from the heritage fund, and that the heritage fund will belong to agriculture. I hear things like this. My question relates to ways in which the heritage fund at this point may be able to deal with the immediate crisis in terms of agriculture. I am wondering, first of

all, if the minister has looked at some of those options, and could he give some insight from his perspective on that matter?

MR. FJORDBOTTON: Mr. Chairman, I go back to November 1982 when we were elected under a mandate of what the heritage fund was supposed to do. If there are any changes made to the direction of the heritage fund, they would have to be made by the MLAs in this Chamber. I would hate to see the commitments outstanding in irrigation and a number of other projects now funded by the heritage fund jeopardized in any way. I think they're important to continue. Those commitments have been made, and that call has been made on the heritage fund. I'd like to see that continue.

In addition, I think it would be crucial for us to look at recommendations coming from this committee and from the MLAs in this Chamber as to what direction we can go, utilizing the funding that's available from the heritage fund and also on directions we might take. I don't think anyone I know of has a great crystal ball. Who would have ever expected a drought this year? We're not sure what next year will bring. If we all look at it, take a reasonable approach and recognize that there isn't enough money to solve all of the problems for everybody but take the most meaningful steps, I feel comfortable that we'll come to that conclusion.

MR. R. SPEAKER: Mr. Chairman, a supplementary to my question. First, one of the concerns of the farmers is the cost of credit. Certainly, we do a number of things through ADC, and you explained them very well here today.

Secondly, on a broader base, during and following the 1982 election there was the interest shielding program which shielded the interest for farm loans down to 14 percent. Has the minister reconsidered that program for continuance under the present circumstances?

MR. FJORDBOTTON: Mr. Chairman, that had best be addressed to the Provincial Treasurer, because interest shielding covers a much broader spectrum than just agriculture. I go back to last year, I believe, to the response in the heritage fund by the Leader of the Opposition at the time, who said that it calls for each minister to really look at it critically.

I can't remember the exact wording he used now, but it was that if you look at shielding interest rates down lower in a period of higher interest rate, who receives the benefit? The banks or the people who are actually receiving the credit? Interest shielding is a very costly program, and you couldn't look at it alone in agriculture without doing something with small business and a number of other areas.

My view is that I think it would be difficult to put in an interest shielding program now, but that is a question that should be directed for response to the Provincial Treasurer.

MR. R. SPEAKER: Mr. Chairman, to the minister. In discussing a number of items with the Premier, he made the comment that it was a rainy day just prior to, during, and right after the last election, and the interest shielding program was a very significant one where the government was able to react. He was lauding the program, and we all supported him in that praise.

On that basis, has the minister any pressure from the general public to go in that direction again, or is credit not the major problem that we would have to face, say, in using the heritage fund to assist farmers? Is the problem more in the area of just making credit available to those who are in financial difficulty, to get them over the hurdle?

MR. FJORDBOTTON: Following the time of rapid expansion and inflation that we've had, there is always a rationalization that needs to take place. Our view has been that credit is one component of the expense side of your ledger. It has become a significant one; there's no doubt about that. But there are other areas with respect to input costs that need to be addressed. We've felt very strongly that those are some of the areas we could move in, and maybe even have to move in in isolation from the rest of Canada, to get rid of disadvantages here. Cash flow is important. It doesn't matter what the interest rate is on debt; if you have no income, it's not going to help you very much.

The whole area of interest costs is important. No one wants to underestimate that. But I think it's also important to look at where your dollars can best be spent to try to improve the cash flow of our producers. I look at what we've done in the purple gas program, the fertilizer program, and a number of other

programs that I think are meaningful steps.

The whole credit area is one that is receiving attention not only here in Alberta but everywhere I've been in the world. They have a severe credit problem. I think that is even more so in the United States. In Alberta we're fortunate to some degree. We have roughly a fifth to a quarter of the agricultural debt of the Agricultural Development Corporation at a lower interest rate. It carries roughly one-third of the longer term debt. That's what the major concern is.

Coming back to operating credit, that was one of the areas that was a concern, and we've addressed it to some degree with our guarantees and in trying to help out in that area. But looking at the whole area of credit, I don't see any simple solutions.

MR. GURNETT: Mr. Chairman, I'd like to begin by also thanking the minister for all the good information that was provided this afternoon and to express appreciation for the number of announcements and the activity of the minister in the department and the demonstration that makes that there's a real concern to try to find answers.

I'd like to ask my first questions about the credit and interest problems as well. The minister, in talking about ADC programs at the beginning and devoting a lot of time to that, is accepting that that certainly is a very key part. While I understand that it's tied in many ways to things that are happening internationally and nationally, I would like to ask some questions particularly about ADC.

One of the concerns I hear a lot of people talking about — for example, in our area there's a new little organization, the Alberta farmers finance association, that I've spent a fair amount of time talking to. It concerns this whole area of the perceived unwillingness of ADC to renegotiate, to discuss changes, and to make changes in loans. I know you referred to the number of adjustments that have been made over the last year, but among producers there is still quite a feeling that the mandate of ADC could be broadened and they could be more open to renegotiate on these kinds of things. I'd appreciate some comment, particularly in view of the perception among producers that maybe we're now at a point where the chartered banks are doing considerably more of this and are more willing to do it than ADC, in fact, is.

MR. FJORDBOTTEN: Mr. Chairman, I just can't accept the unresponsiveness of ADC. We have to remember that we make loans to people who couldn't normally get loans anywhere else. With beginning farmers, we're the only game in town. With a number of the others, they wouldn't get financing if it wasn't through ADC. We're dealing with public money here, and there has to be a reasonable approach taken. In each case, on each file that comes forward where there's a concern, the loans officers work during the course of the first year to try to do all they can, and they have a great deal of latitude to try to make some adjustments as long as there is no fraud or there hasn't been a selling of assets that are secured and at least if the individual is being entirely open. It's a two-way street. We have to expect ADC to be responsive, but we have to expect the ones who are coming in to also be realistic.

If it goes deeper than that and there have to be more adjustments made — I don't know how much the board of ADC met this last year, but they've put in an enormous amount of time, and the 18-hour days of the chairman, in going over each file and trying to find out if there is some way that some adjustment could be made. If we look at the ones who are in difficulty, each one of those cases is dealt with individually. In fact, I have to say that I think ADC is one of the best friends the farmers have. When you say no to somebody, that you can't go any further, that that's it, of course they're concerned about it.

I'm aware of the group that met, and I'm aware of some of the concerns they raised. One of the concerns I have about the group is that they don't seem to fully understand all of ADC's programs. I don't think there's a full appreciation and understanding of the close to 900 amendments that were made to accounts to try to fit them in and to help that individual stay in business.

I'm not saying we couldn't do more. I always think we can do more. It's always been my view that no matter what we're doing, we can always do it better. That's also the philosophy of the corporation. If there are areas that are specific on accounts, I don't get involved in each one of them. I don't believe that anybody should get anything for political reasons. If we establish the policy and you fit under the policy, you qualify. I try not to get involved in any of the loans, but I make sure that each one is treated

fairly. I can honestly say that since I have taken on this job and my responsibility with ADC, I think that's been done. There have always been improvements. The corporation has improved the way they've done things, and under changing circumstances each year, they have to change. Hopefully some of the concerns that have been raised can be put to rest by good communication.

MR. GURNETT: Good. One of the specific areas, and you did mention changes in the beginning farmer program — that's certainly an ongoing concern. I wonder if there's any consideration being given now to further adjustments there. On a number of occasions, I've heard people talk about the shock of that sudden change when they lose the rebate, whether in view of the time it takes to get established, given modern technology and so on, there's some prospect of further improvements so that that program might extend to perhaps the 10th year instead of, with some improvement, to the sixth and seventh as it now is.

MR. FJORDBOTTEN: Each one of the loans is given on the basis of 12 percent interest. They're not worked out on the basis of 6 percent. This 6 percent earned interest rebate is to try to help those individuals through their period. We can say that five years isn't enough; it should be 10. You extend it to 10 years at 6 percent, you start making management decisions based on 6 percent interest, and then all of a sudden you've got the shock to 12. I recognize that we are in more difficult times now. In discussion with the board we came to the clear recognition that the shock of going, in these times, from 6 to 12 percent was just too much in the sixth and seventh year.

I also recognize the risk of doing it on a temporary basis like we did. It's only until 1987. When you put in something temporary, sometimes it has a habit of becoming permanent. So I think going to the sixth and seventh year at 9 percent is a good cushion that should help them. But as far as saying no, there won't be any changes, I can't say that, or I can't say there will be. A program is only good if it's meeting the needs of the times. Under ADC we've always taken the responsibility clearly that if there are amendments or changes that need to be made, we'll make those, considering

all of those factors. But we still have to recognize that we're dealing with public money, and we have to deal with that responsibility.

MR. GURNETT: Right. I understand, and I can add, of course, that the chance of the shock being devastating after 10 years may not be as serious as after five. I understand those are all things that have to be evaluated.

I wonder, Mr. Fjordbotten, if you can provide any figures. You mention the 1 percent of loans with ADC that are in arrears beyond the one-year line. Do you have information about such things as how much land ADC is now basically holding and about how many quitclaims and bankruptcies have also been associated with ADC loans in addition to foreclosures? I'd appreciate a more complete statistical picture, beyond that one figure, of how serious the debt crisis is for Alberta farmers within ADC's lending.

MR. FJORDBOTTEN: I can't give you all of them, Mr. Chairman, but what I can give is effective this past week. The best numbers I have are that we now have under our administration 119 properties in the entire province. The number of properties that we've leased at this point is 84. The number of properties in the tendering process is 7. The number listed with realtors is 42. The number of properties to which ADC took title since January 1, 1985, is 74. The number of properties sold since January 1, 1985, is 23 properties completed, 10 partially completed.

I don't have the numbers with me on the other questions you asked. I'd be happy to get them and provide them to you.

MRS. CRIPPS: Thank you for the comprehensive overview of the programs.

My questions relate to the Farming for the Future program. I wonder if there were any remarkable developments. Nigel, you covered at least some of that in your overview. I'd like to know what kind of contract, if any, we have to ensure that the people of Alberta benefit from major discoveries or breakthroughs. In other words, do we have any agreements with regard to royalties on patents that are developed as a result of funding for Farming for the Future?

MR. FJORDBOTTEN: I can't answer that

question, because I don't know. I don't believe so. What we do with each project and the research that is completed, Mr. Chairman, is try to make sure that that's communicated to the agricultural community quickly. The only area where I think there could be some of that is that we've made it very clear to other countries that if they want to capitalize on research, it took us dollars and everything else to develop that, and we're not giving it away free so they can go in competition with us. There has to be a trade-off there. But with respect to royalties, I'd have to get an answer to that specifically and get back to you.

MRS. CRIPPS: I'd really appreciate receiving an answer, because the people of Alberta have a major investment in some of this research. Looking at a couple of research initiatives, I notice one at Beaverlodge with \$943,855 in a number of projects, another one at the University of Alberta where there is \$506,000 involved in five projects. When you end up getting that kind of funding under a number of major project areas, is that possibly being used as auxiliary funding for the university or the agricultural research station?

MR. FJORDBOTTEN: One of the problems with the whole area of research, Mr. Chairman, is that you have a number of people in farm research. It creates make-work projects, and we've been very cautious not to do that in Farming for the Future. What we try to do is take all the projects that are submitted — they come in and then go to one of the nine program committees. Each one of those has producers on it and is chaired by a producer. They make a recommendation to the research council as a whole.

Each project is looked at on its merit. We have to remember that Farming for the Future was put in place to try to increase the net income of Alberta producers. So we try to look at the best projects. We don't pay much attention, particularly, to where they're being done. We try to pick the best people to do that particular project. When it goes to the research council, they look at the budget and what they have and prioritize those research commitments and put them in.

One of the problems through the process has been that the federal government has pulled back on their research in some areas because it

has been a neat one to cut back funding for. We didn't want to use Farming for the Future money to start filling gaps they left. We also didn't want to just create make-work projects for some of those people. Each project has to stand on its own merit. But whether they're done here in Alberta, in Saskatchewan, or wherever the best place is for it to be done, recognizing that what we're trying to do is increase the net income of our producers, we'll do it there.

Some of the projects are more expensive, but some of them are a little longer term than maybe we would like even in Farming for the Future. You have to remember that we're trying to look at short-term research projects, not longer term ones.

MRS. CRIPPS: Mr. Chairman, I wasn't talking about one place. In those cases I was picking out one person who had applied for four or five projects. I'm pleased to hear that there's a committee of people who are looking at the projects and producers involved.

I note one project here: the effect of delayed breeding of dairy cows on milk yield, reproductivity, and economic efficiency. Surely to heavens that could be extrapolated from the records of the DHI and shouldn't cost \$150,000. So there must be more to the project than what it would appear from here. If a producer is involved, I guess they have probably done an assessment I'm not aware of just looking at the title.

One other question relates to the "in progress" on the on-farm demonstrations. You've got a figure there for '82-83 funding awarded in many cases. Then, when it comes to '83-84, it says, "in progress." Does that mean that there's funding contemplated, funding awarded, or that the project is just carrying on from '82-83 and that's all the funding that's involved?

MR. FJORDBOTTEN: I'm sorry, Mr. Chairman, I can't answer in a specific way on some of them, because the on-farm demonstration has a different approach. In many of the on-farm demonstration projects they say: "This is what we would like to do. We would like to tap into your expertise. We're happy to share our results with you, but we don't want any money. All we want is a sign." Some of them say: "If you give me the funding for this year, I'm going to

continue it next year at my own expense. All I want is a sign." So each one of them is unique in its own circumstance, and they're dealt with that way.

I'd like to answer a little bit about the first point you raised. It had to do with the . . .

MRS. CRIPPS: About the DHI, you mean?

MR. FJORDBOTTEN: I'm sorry; my mind went blank. I'll come back.

MRS. CRIPPS: About the dairy, effect of delayed . . .

MR. FJORDBOTTEN: Oh, I was going to mention about the project title. Don't let the project title sometimes fool you, because it doesn't give you the whole thing. On each of the projects in dairy, for example, they do some background work to find out what has been done, so we're not duplicating research or there isn't a cheaper way to do it. That's already looked at. What we try to do in the titles — you can't put everything in, but we hope that anyone who has a specific interest in some of that research gets ahold of us. We put it in the Country Guide and everything. We hope they'll contact us and find out, and we'll provide all that information to them. It's boxes and boxes full if we were going to send everybody every research project, but we're happy to do it on each one. In fact, we encourage it.

That's been one of the strengths of the on-farm demonstration project. Because someone was doing something with tillage, they're interested in the research and the program, they see what other projects are there, and they go through them. Because they have that interest, they contact us and say they would like this information on this other project. So it's a way to get information to the farm level, too, that's a by-product of the on-farm demonstration program.

If you notice in here, while we're on that topic, last year I believe there was a recommendation to increase the funding for on-farm demonstration. That was done, and rightly so. I hope you recommend that it's increased even more.

MR. HYLAND: Mr. Chairman, the minister dealt with part of my question in his answer to the previous question. It relates to the same

question I asked on August 21 last year regarding the pullback of the federal government on research. In that answer I think the minister said he had a letter from the then Minister of Agriculture assuring him that they wouldn't be pulling back any more. The concern I expressed then was, "Are we actually gaining with our Farming for the Future, or are we just plugging the holes where somebody else backs out?" I wonder if he's had any discussion with the new Minister of Agriculture on that subject, or if he could help us in any way.

MR. FJORDBOTTEN: Last year I was deeply concerned. I believed there were some 14 permanent positions that were scheduled for reduction in western Canada. That was just unacceptable. I contacted the then minister and said: "Listen, you can't do this. You can't cut back on research positions now, because now is the time the research needs to be done." According to 1984 correspondence, most of those positions were refilled. In fact, I think all of them were refilled. The problem with that, though, is that we want to make sure that they're not decreasing, they're increasing.

Following up on that, this past week I wrote another letter to the now federal Minister of Agriculture, and said, "I'm concerned that if you're going to look for reductions in your budgets and cost saving, you don't target in on the research area, because the research being done now in a number of areas in western Canada is absolutely crucial." One area, for example, is solonchic soils. I think that is some research that should be enhanced.

So in some cases I can say the research at the moment is inadequate, and it's inadequate, to some degree, because of the federal government reductions. But as far as I know, Mr. Chairman, the positions the hon. member mentioned have been filled. In fact, I think we're even going to get one more than we had before, and that is at the Lethbridge research station.

MR. HYLAND: Thank you. I hope they bring in somebody to do some research on soft wheat and better research on winter wheat in the area. I note we funded one of those in Lethbridge.

The other question I have, and you touched on it partly in your opening comments, is the amount of money going to the universities on

Farming for the Future and the federal research establishments. Although I realize that we made the recommendation last year, and the on-farm demonstrations were a little more than doubled, it's still -- what is it? -- just slightly less than 10 percent of the total amount. Is there anything that we as a committee should be doing or you as minister or the department or somebody can do to get the researchers and farmers together again so that we can find out how much of this almost \$4 million worth of pure research we're doing is useful in the field? What can be done so that we get a little more of that out in the field in activity going on?

I just note in the area that you and I both represent, parts of region 1, through no fault of anybody's, that on-farm demonstrations total \$43,000. The average project in the research is above that. There's got to be something we can do or something that can be done to see that we get more on-farm stuff done: either get the researcher and the farmer together or do something to get it done.

MR. PENGELLY: Mr. Chairman, to the hon. Member for Cypress. I'm glad you brought that up. That is a problem. Many of us feel that there should be more of these projects coming from the private sector, from producers and processors. But the way it is set up now, we sit back and wait for the researchers to present them to us, and then we pick what we think is the best. I would invite the committee to give me any ways they think we might be able to turn that around, and I'd be very happy to present them to the chairmen of the nine different groups to discuss. Yes, that is a concern.

MR. FJORDBOTEN: Mr. Chairman, if I could supplement that. I've always thought that it takes two to dance. If you're going to expect the producers to put out the effort to go to the researchers, how about the researchers going to the producers? I think they should get out of their institutions more and be out there actually seeing some of the problems that are on the farm. I know that Dr. Roy Berg at the University of Alberta would be very supportive of that approach, trying to see that there's more communication between the two. I think a lot of researchers working 9 to 5 could spend a weekend or something looking at some of the

on-farm demonstration projects that are under way or do something else. I don't know what we can do to encourage it, but we'd certainly welcome any suggestions you have.

MR. HYLAND: I notice you passed out the information on your Farming for the Future conference. I guess this is the second one. Maybe such things as that will help the interest, but I said it last year and I'm still concerned, as you guys are: what do we do? How do we get more usefulness out of all this money we're spending on research?

MR. R. MOORE: Mr. Chairman, I realize that all our attention is directed to where Heritage Savings Trust Fund moneys are utilized, and some of it gets utilized indirectly. So my question will go through another area. When I originally came in here, I had 10 questions, and they were all answered in the few opening remarks of the two gentlemen. Fortunately, I have an 11th question, and that relates to the biotech project that received some funding through Vencap, which has heritage trust fund money involved. I understand that the end results from this project do relate to agriculture. Mr. Minister, I'd like to know just what benefits Alberta agriculture or the citizens of Alberta can expect from this funding to this biotech organization.

MR. FJORDBOTEN: I have to say, Mr. Chairman, that I think it's one of the most exciting projects that have come to Alberta. I'm really excited about it. I knew about it a couple of weeks before it arrived, because I was interested in seeing what they were really intending to do. I'm happy about it because I think the private sector should be far more involved in the whole area of research. It shouldn't be left to taxpayers' dollars only; I think the private sector should be involved. Here's a company that Albertans put money into in Massachusetts, and now they're bringing it home to Calgary.

The first project they want to work on has to do with canola. We have to increase our canola yields. We have to find varieties that are resistant to some of the chemicals we now have, so we can increase those yields. That's one of their first projects. I think that's really excellent, and I compliment them. I look forward to helping them in any way we can,

because I think there are going to be some just revolutionary new ideas come out of that industry that's now come here.

The other area is forestry. We farm our forests, too, so I suppose we can call that agriculture, to a certain degree. If we could have forests that grow more quickly, with quality wood, it makes harvesting our forests — and creates jobs here in the province. So I think it's really exciting, and I compliment them. If there are any suggestions of ways that we could be of assistance to them, I sure welcome them.

MR. R. MOORE: Thank you.

MR. NELSON: Mr. Chairman, I'd like to ask a couple of questions with regard to the Food Processing Development Centre, considering that we have put a fairly decent capital investment there. Earlier I noticed some of the products sitting on the table as we came in. I am wondering if that is the end result of the projects at the food processing centre in Alberta or whether that's just an example of what they are trying to achieve. What's the significance of these particular products? I know they've all been basically manufactured in Alberta, but I'd like to know the significance of their relationship to the Food Processing Development Centre, if there is any at all.

MR. FJORDBOTTEN: Let me give you a rundown of a couple of the products, Mr. Chairman. I won't pick any particularly off the table. They're just there. I don't believe they would be there if it weren't for the Food Processing Development Centre.

We have a new, chewy, cookie formulation for a local cookie manufacturer to compete with imports. That's been completed, and that company is currently pursuing its intention to sell that product commercially. We have a development of a prepackaged, marinated beef. I think that's another one that wouldn't have happened without the development centre being there. We have a seafood salad that was developed. We assisted in the development of premixed bakery products such as muffin and cookie mixes, and because of that project we now have a new business in Calgary that has a commitment to a new office and a warehouse and has three full-time staff. That's a small thing, but the jobs are created.

We've got the centre and staff facilities in

conjunction with the Alberta horticultural research station. We're instrumental in production and test marketing quantities of that Saskatoon jelly that's there. The Food Processing Development Centre assisted a local processor with the development of a premixed slush beverage formulation, which was previously imported to the province. The salad dressing that's there is now being manufactured in the province of Alberta. On and on with a number of projects, each one of them small, but each grain of sand does a mountain make.

MR. NELSON: The minister just left himself wide open. The reason I asked the question was that, being in the food business myself, in the private sector, I question whether some of these were examples only, because products are there that certainly were not initially developed through processing at the development centre. I hope they weren't put in front of us to suggest that they were. Otherwise, somewhere along the line we may have some money being thrown down the tube. I hope the moneys that are being expended there, through the Heritage Savings Trust Fund or otherwise through the government, are being done to generate new products and new research, rather than taking some old research.

The package where that sandwich is, for example, was not developed in Alberta. I know it's a 28-day shelf life unit, and most of them go soggy in that period of time inside that package anyway. But initially that came out of Quebec or Ottawa some years ago. These are examples.

I've suggested to the Chairman that we all take a trip down there to have a look and see how we're spending the money. Hopefully it is in the area of developing new initiatives rather than taking old ones and presenting them and suggesting that they are new.

MR. FJORDBOTTEN: Mr. Chairman, to the hon. Member for Calgary McCall. I didn't leave myself open at all; I left him an opening. That opening was to make clear that it doesn't necessarily mean the full formulation of a new product. It might be a new package for a present product, it might be some extra formulation for that product, or it might be an entirely new product. That lab is open to anybody in the province that wants to improve a product or develop a new one and run bench-scale production and even go up to a pilot plant

type of production to see if it can be feasible. It's a very flexible thing, and it's not just for one thing. In fact, the ingredients within may be the same, but the package may be different, or the package may be the same and the ingredients a little bit different. So it's the flexibility in that approach, which tries to improve present products and develop new ones.

I encourage everyone to go to the Leduc food lab, because after you visit there, you'll come out being their best salesmen.

MR. NELSON: We could have a very interesting debate here, Mr. Chairman, and certainly I don't think this is the place to do that right now. But I'm encouraged that we're making every effort to develop new and improved products as we go along.

One other question is: in developing these products with private industry, is it just the process of trying to research and develop the product by improving the product itself, the packaging, et cetera, or are you in the business of marketing?

MR. FJORDBOTTEN: No, Mr. Chairman. The centre works closely with the marketing sector of Alberta Agriculture and maintains close liaison with other facilities; for example, the protein, oil, and starch plant in Saskatoon, universities, and international visitors that come in. No, they're not involved in getting out in the world and marketing the product, but they maintain that close liaison so that if there is marketing assistance required, they are pointed in the right direction.

MR. GOGO: Minister, I have very much appreciated your quite detailed overview of your department, along with Mr. Pengelly, as it relates to the heritage fund. I want to ask you a couple of questions on irrigation. It's been long established as a matter of government policy that irrigation in southern Alberta, from the point of view of cost/benefit -- my understanding is that the 86/14 formula is virtually enshrined, whereby the public of Alberta receives 86 percent of the benefit and the farmer, 14 percent of the benefit. We've spent to date, according to the report, \$152 million, of which \$25 million was spent in the year we're discussing today.

I'd like your views on the following subject. There are 13 irrigation districts in Alberta, and

I believe the policy has been that those irrigation districts select their own boards and make the decisions as to how money is spent, perhaps in conjunction with Alberta Environment. I've had representation from people with private irrigation systems. I understand there are 500 to 1,000 of them in the province. You take people like Mr. Bradshaw and the Birdseye ranch, with 6,000 acres. He's had an irrigation system on that land. It's private and it's been there for many years. He hires the backhoe, and he clears those canals and the trenches and the ditches and whatever you have to do, at his own expense. Yet very clearly, based on policy, the public of Alberta benefits to the extent of 86 percent of whatever comes out of that system.

My question is: have you given any consideration to your program's providing some type of assistance, maintenance of canals or whatever, on those areas where people have a private irrigation system?

MR. FJORDBOTTEN: No, Mr. Chairman, we really haven't. There's a bit of difference, in the example used, between the Birdseye ranch and the location to water and the location of some of the areas where we are now growing specialty crops and don't have the water. In fact, many of the communities in that area rely totally on the irrigation system for their domestic water supply.

The only area where there's been some assistance is in the program I announced recently with respect to dugouts. One modification I made to that program was for stock watering dams and things like that that may be some assistance to them. But direct assistance to a private irrigator, no. That isn't something we've looked at. We operate strictly under the irrigation districts. You're able to establish an irrigation district in the province if you have a number of individuals that get together and work through the irrigation program and with the Irrigation Council. But no, there has been no consideration that I'm aware of given to assistance to private irrigators.

MR. GOGO: Aside from the fact of the supply of water, which is considered a separate topic, ignoring the Three Rivers dam and providing a secure supply of the water, just dealing with the irrigation system on the land in terms of the

ditches and so on, it seems to me that if, in fact, the public benefits 86 percent, to the extent of whatever is produced off irrigated land, the public is the winner. It costs the farmer 14 percent. It would almost seem to me, in terms of fairness, that maintenance, with canals and so on on privately owned land — I really don't understand the difference, why we wouldn't give consideration to providing some type of assistance for maintenance of that land, because by definition of the formula 86 percent of the benefit goes to the people. If we are in the business of maximizing the benefits from irrigated land, it would seem to me, Minister, with respect, that it would be in our interest to assist wherever we could to increase the productivity of irrigated land. Wouldn't you agree?

MR. FJORDBOTTEN: Mr. Chairman, to the Member for Lethbridge West. I wasn't saying no to his proposal. All I said was that at this point there had been no consideration given. There may be great merit in doing that. I'm happy to take his representation.

I have to clear up any misconception there might be that irrigators receive 86 percent of the benefit from the irrigation system. That is including the communities that rely on their domestic water supply. That's taking into account the many other uses there are for irrigation water, not just the irrigation farmer.

On the whole area of private irrigators I have not received any request that I'm aware of, to assist private irrigators specifically, but I'd be happy to review that.

MR. GOGO: Mr. Chairman, I really appreciate the minister's response, and I will certainly undertake to see that he receives written representation.

My final question, Minister. I understand that the objective of the rehab and expansion program is to increase by half a million acres the amount of land that's under irrigation by 1995, 10 years from now, yet we continue to hear of difficulties with marketing and transportation of the product. This, as you know, was a concern of this committee last year, the Member for Drayton Valley and others. Have you recommended that there be some additional research? I'm not that confident about what goes on now, in terms of both marketing techniques for the produce of

southern Alberta — I'm talking now about the marketing of the 1 million acres and hopefully the additional half million in terms of sales and the research into transportation. Would you care to respond to that?

MR. FJORDBOTTEN: Mr. Chairman, one of the areas of deep concern is marketing the products. We're a landlocked province, and marketing has always been a problem for us in the transportation area, to get our products to market and also identifying the markets where we can go. If we look at the number of products that we now import into Canada that we could produce here ourselves, I think there is a fair amount of research being done by the private sector, by individuals, and by the government into new specialty crops and new areas that we should be working in. It doesn't make any sense in my view to produce hard spring wheat on irrigated land. Soft spring wheat, fine; that's where it has to be grown. But there are other products that I think now — we're developing further irrigation systems. Considering this last year, when one of our major crops, sugar beets — really, we lost it because of the global situation and not having a national sugar policy in Canada. Now those acres are into something else.

I think we need to enhance significantly the work we're doing in research for irrigated crops and for processing more of those products here. I have to say that in our rehab program, we're not only looking at expanding the irrigated acres; we're trying to secure what we have. Looking at some of those canals and the shape they're in, all you'd need is one break and there would be no water. Trying to rehabilitate those and bring them back to where that supply of water is secure is, I think, just as important as trying to expand the irrigated acres. The amount of water that's available is something that we have to manage more clearly in our irrigation system.

With the drought that we've had this past year, when you look at the irrigated areas, it's like an oasis, as the member knows, being from that particular area. I agree totally with him, and I look forward to recommendations that might come forward on what areas of research we might enhance, one of them being not only irrigation crops in southern Alberta but I'd like to see some enhanced research on northern crops.

MR. HYLAND: Mr. Chairman, my question is related to the upgrading of the irrigation systems under the 86/14 formula. I think somebody asked last year, and I think it's especially important in a year like this. I guess it's the driest record we've ever had. Does the minister think that that portion of the program could have been increased so that over the short term the irrigation districts would have had more money to upgrade their system faster?

MR. FJORDBOTTEN: Mr. Chairman, I suppose that's possible, but in my discussion — not only my own, but the Minister of the Environment's — with the irrigation districts, it's moving about as quickly as it should, recognizing that some of the projects take a little longer if you have to totally rehabilitate, depending on soil conditions and pipelining and a number of other factors taken into account. The irrigation districts, in my latest discussions with them, are very pleased with the number of dollars that are available. They don't feel they can move much faster. We have to remember that under the formula they have to come up with their 14 percent, and they hit a limit on how many dollars they have available to move any more quickly than we are. They feel very comfortable that the program that's now there is the proper amount, considering the economic times and the speed at which the development should take place.

MR. HYLAND: Does the minister have any idea of what percentage of the feeder canal systems are upgraded?

MR. FJORDBOTTEN: I'm not sure I can answer that question, Mr. Chairman, unless I have an hour. I have in front of me a listing of each one of the projects and the progress that has been made, the dollars that have been expended, and where it's at. If anyone has an interest in that, I'd be happy to provide that information.

MR. R. SPEAKER: Mr. Chairman, my question is with regard to the Farming for the Future Progress Report 1984. On page 25, there's one item, Wind Power for Pumping Water. My question is related to that item in the sense that one of the aggressive, growing groups in the province of Alberta is the small power producer group. They're moving very quickly and have some very good ideas.

I wonder if there has been any further research done beyond just this, in terms of pumping water, generating electricity for irrigation units, supplementing the power, and how it can be used. I understand that in Lethbridge, at the experimental station, there are a number of wind generators that are being tested there. Is that part of the research money from here? Does some of the money go into those projects?

MR. FJORDBOTTEN: I don't believe it's coming out of Farming for the Future totally, but there are a number of projects. The one you identified there is done by an individual on a ranch that's trying to come up with an easier way without having to run power lines to move water. The small power producers association, that happens to be headquartered in my own constituency, has been very active in trying to look at new and innovative ways of capturing and using the wind as a benefit rather than always complaining about it.

At the moment they want to develop wind power, put it into the system, and get paid for it, and then they would draw electricity back out. In most cases they feel that they could be the beneficiary of making a few dollars on it. The difficulty they're running into on that one is that the wind doesn't blow every day. One of the things we all expect when we turn on the light switch is that there be lights. If there isn't that supply of electricity in the system, that may not happen, or there may be peak periods and there's no wind blowing. That's an area they are working on to try to develop.

There are a number of other small projects that I'm aware of where individuals, rather than putting in a power line, have put in their own wind-powered generator and are turning the meter backwards. But the amount they're receiving back from the utility companies for turning the meter backwards isn't as much as they're paying when the meter is running forwards.

So there is a great deal of discussion taking place across the province. I find very interesting and challenging some of the new approaches that are being considered, Mr. Chairman, but I'm not aware of any further research that's being done specifically, outside of the ones that are identified in here in the Lethbridge project.

MR. R. SPEAKER: The other one I want to have further information on, Mr. Chairman, is at the bottom of page 40, called Evaluating Debt Contracts for Alberta Farmers: A Sensitivity Analysis. I wonder if that report has reached a stage of conclusion yet, and is it available to us as members? If not, when?

MR. FJORDBOTTEN: Mr. Chairman, of course it's available. When it's done, it will be available, because it's part of the project. If it is completed, I'll see that you receive a copy. I will notify you, Mr. Chairman, and the hon. member, of what the progress is on that report if it's not completed and likely the date of completion, so you can receive it. I'll take care of that.

MR. GURNETT: Mr. Chairman, I've enjoyed the discussion about irrigation this afternoon and would maybe ask a question initially in a slightly different direction. It's strange to be talking about it with the circumstances we have this year, but in our area there is frequently a drainage problem rather than a need for irrigation. The two aren't inconsistent anyway in fairly close areas. I wonder if there has been any consideration of the idea of heritage fund support for drainage districts where that's appropriate. Right now, I understand, municipalities pay 25 percent of drainage projects, yet they're really parallel to irrigation projects in many ways. I wonder if the possibility of drainage districts similar to this irrigation system has been looked at at all.

MR. FJORDBOTTEN: Mr. Chairman, I think that's an excellent suggestion. I understand that the Minister of the Environment will be here tomorrow, and that would be a question best directed to him.

The difficulty with drainage is that it's a lot easier to take water to some place than to move it away from somewhere, because if you're moving it away, you have to have somewhere to move it to. In Agriculture we basically work with on-farm drainage. We provide the assistance and expertise necessary for an individual on the farm. Once it leaves the farm, it leaves Agriculture's jurisdiction and has to go into Environment, because the water has to move somewhere. Many times it's salty and a number of other problems with it.

Since the Minister of the Environment is coming tomorrow, I think that would be an excellent question for him, because it falls under his responsibility.

MR. GURNETT: Thank you. I guess I'm interested in part, though, because the larger benefit to agriculture is certainly there. It frees up a lot of land, much like this irrigation system. The possibility of seeing it co-ordinated and organized is what I like and what I sense is there with irrigation.

In connection with irrigation, I think it was in connection with the Oldman River dam, I remember there was a report or a study that indicated at that time that maybe up to somewhere around 70 percent of the water in irrigation systems is lost, in a sense, or is not used for its intended purpose. Through a program like this that's rehabilitating, I wonder if there is a more accurate figure now. What percentage of water do we think is being lost in the irrigation systems?

MR. FJORDBOTTEN: Mr. Chairman, I believe 70 percent is extremely high, but there is loss. Even with the rehabilitated system there would still be some loss, in any case. Evaporation and a number of things take place before it gets to source. I believe there are some figures available that were in the study done by the Irrigation Projects Association and also some within the department. I don't have them with me, and I don't recall the numbers, but I'll be happy to provide that.

I have to say, in answer to the other part of the question that had to do with co-ordination between Agriculture and Environment on drainage, that I couldn't agree more. Personally, I wouldn't want to see Environment people running all over a farmer's land. I'd much rather have our Agriculture people out on that land, because there is a lot less problem. I'm not being negative to the Department of the Environment, but when it's on the farm it belongs to Agriculture. We should work that to try to hook into whatever drainage system there is from that farm. I think we can do the best job of that. There is no doubt that once it leaves the farm and gets into a bigger system, then it's under Environment.

I can assure the hon. member, Mr. Chairman, that I will keep a very close eye on it. I believe it should be a co-ordinated approach, and I

believe it's something we should do, recognizing that it's going to be very costly.

MR. GURNETT: Yes. Just in a slightly different area, the priority that you put on research is really encouraging. I've enjoyed listening this afternoon, as all the comments I think have emphasized that that's something vital.

Because it has been talked about even earlier in our meetings this summer, I wonder what your feelings are about how you evaluate the possibility of agricultural research through a foundation system as we have now with medical research. It seemed the people who were here who are operating that system spoke very strongly about the fact that that gave stability and freedom to do long-term funding of research that isn't there, in their opinion, on a year-by-year basis. If you could just dream and had your choice, would you see agriculture research through a foundation like medical research or continue as the Farming for the Future program is?

MR. FJORDBOTTEN: Mr. Chairman, I'd like to see Farming for the Future continue, because I'd hate to see that thrust lost in some bigger entity. As far as there being a foundation, yes, I couldn't agree more that there should be one. I think it should co-ordinate research between the private sector and the public sector and private individuals and a number of the programs that are there.

One of the things that has bothered me for some time is that when research is done, it's put up on the shelf; it never gets to where it should be. I'd like to see some better transfer of that technology. I'd like to see some better co-ordinating role of all the research that's done, not only in agriculture but I think it crosses over many boundaries that affect agriculture in an indirect way.

Yes, if I could dream, I would dream about there being some central thing that would co-ordinate. That follows up, to some degree, on what we had in the white paper, that there should be some kind of a co-ordinating body or something that would be fulfilling that kind of role. I don't think it's really a dream. I think it's something that is realistic and something that we should focus our attention on.

MRS. CRIPPS: I particularly agree with the

minister's comments to the Member for Spirit River-Fairview in answer to the last question. In answer to an earlier question he talked about research being applicable and practical. I share the minister's sentiments there also.

You were indicating that you didn't know how these people could become more knowledgeable about the actual farming practices they're supposedly doing research on. I'd just like to suggest that maybe you make it a condition of funding that in some cases they somehow gain that knowledge and experience.

MR. CHAIRMAN: Mr. Gurnett.

MRS. CRIPPS: Oh, did you have another question?

MR. GURNETT: I've got a lot more questions.

MRS. CRIPPS: Oh, sorry.

MR. FJORDBOTTEN: Mr. Chairman, could I just give something that I think is important, considering some of the events that have taken place in Farming for the Future? We're involved in grasshopper research, and I think some members find it very interesting because of the devastating effects of the grasshopper populations. They don't move in from Montana, Saskatchewan, or anything like that. They're here, and if the conditions are right, they hatch.

Farming for the Future funding is totalling \$116,000 to support two projects on grasshopper control. Two methods are being investigated, and I don't know how soon they can be ready. I don't know if it's ready for this grasshopper outbreak, but they seem to come in cycles. One involves a disease-causing micro-organism which affects only grasshoppers and locusts, so that the beneficial insects like honeybees won't be harmed. The other method uses insecticides applied to bran bait. The bran is placed in infested areas, and then the insects eat the bran.

There are ways I think are more environmentally safe. The chemicals we're using now don't have any residual effect, so they are fairly safe; to use a new control that means we don't have to use pesticides is even better. Farming for the Future is funding \$116,000 worth of research that I think is very, very timely.

MR. GURNETT: It would seem that it would be an ideal year to do lots of field testing too, when you've got plenty of hoppers around.

I want to ask one question, not directly about one of these programs but a program that may be there using heritage fund capital. You've been very busy this summer with having to develop and talk about programs to deal with problems caused by weather conditions in the province. Is there a possibility, is any thought or consideration being given to developing a technique or procedure for dealing with widespread weather-caused agricultural disaster that could be in place and wouldn't have to be sort of developed when we're in the midst of the emergencies, that could then depend on heritage funds, if the need arose in a given year, but that we as producers would then know what we could anticipate?

MR. FJORDBOTTON: Mr. Chairman, I couldn't agree with those sentiments more. When the drought committee was established between the federal and provincial governments last year, one of its mandates was to come up with some kind of program that would trigger in events we have like last year. But that work didn't get done, so we came into this year with no real program. So we have to take steps to try to meet it. I think that's wrong. I think there should be a program in place that's identifiable and triggers, so it can't be played with and so everybody knows where they stand.

I also go one step further. Even though we recognize that the crop insurance program is an excellent program, this last couple of years has shown some shortfalls in that program. I think it's identified some areas that now need to be totally reviewed to improve the whole area of crop insurance. As soon as I get five minutes, that's something I will put a little more focus of attention on, because it has to be worked out jointly with the federal government and discussions with the other provinces to try to improve that. So, yes, I agree. Some more work needs to be done quickly.

MR. GURNETT: Just to change subjects entirely, there are a couple of other things I want to ask about. Do you have information about the administrative aspect of ADC? How much of the \$900 million that's involved with ADC is not involved in supporting producers directly but in the administrative side of the

corporation?

MR. FJORDBOTTON: Yes, I do have that. I don't have it with me, but I'd be happy to provide that. I have that information on the administration of ADC, including the head office and all the loans officers and the salaries and all of that. I'll be happy to provide that to you.

MR. GURNETT: Okay. One other area I wonder about. In your comments you didn't say anything about the grazing reserves program. I wonder if we could have just a little update on that. Are there new areas that are still to be developed? Is there going to be more money spent in some of the established areas, and if so, which ones?

MR. CHAIRMAN: Mr. Gurnett, the grazing reserves come under the direct responsibility of the associate minister of public lands, and he's slated to be with us on September 12.

Would there be additional questions forthcoming from committee members? There being none, may I thank you, Mr. Fjordbotten and Mr. Pengelly for a very interesting overview of current agricultural issues in the province of Alberta.

Committee members, we'll adjourn shortly and reconvene tomorrow morning at 10 o'clock for a discussion with the Minister of the Environment. Mr. Gogo, would you pick up your groceries on the way home.

MR. FJORDBOTTON: By the way, Mr. Chairman, in the gallery is the individual from the food processing lab. He will be down here to pick up some of the products, so that would be a great opportunity for any members who have some concerns about specific products to have that discussion.

MR. GOGO: Mr. Chairman, I'm pleased that the minister appeared today. I'm impressed with the wide range of products. I guess we're waiting for that magic moment when you replenish that bottle of Nanton Water you've consumed.

MR. CHAIRMAN: Mr. Hyland, did you have a comment to make too?

MR. HYLAND: I move that we adjourn.

MR. CHAIRMAN: Thank you.

[The committee adjourned at 3:53 p.m.]