Problems in Pulse Marketing Harvey Clark, Saskatchewan Irrigation Development Center, Outlook

I have chosen pulse marketing as the subject of my presentation today for several reasons. Pulses are one of the success stories in Saskatchewan as acreage continues to expand. Most of this success is attributable to dryland growers who are to be commended for their efforts in developing this industry.

Though pulses are important to irrigation growers as well, there has been more difficulty in establishing an industry for those pulse crops which might traditionally be associated with irrigation. Some of these problems are related to production. Dry bean and fababean require a longer growing season. Losses from straight cut harvesting have hampered the development of the dry bean industry.

Making this task even more difficult, early frost in 1992 has left producers disenchanted with beans and other long season crops. Pea and lentil are more established, so there is still widespread interest in these crops among all growers. My presentation has two purposes. I would first like to give my expectations on pulse crop markets for the coming year. Secondly, in doing so, I would like to point out how market psychology may favor another attempt at developing a new crop such as dry beans.

# Supply/Demand

## Lentil

As in all markets, prices are determined by supply and demand. This is the fundamental approach to market analysis. In the case of pulse crops, however, this presents another problem for analysts. Market information for special crops such as pulses is simply not as complete as for the major grain and oilseed crops. Despite the absence of a survey on ending stocks, Saskatchewan Agriculture compiles an annual special crops survey, more crops have been included in this survey as farmers diversify, and an estimate of supply/demand for the major special crops is based on available information.

Statistics Canada has also begun to include more complete information on provincial pulse production, so improvements in the information shortfall are occurring. An initiative is also underway to estimate ending stocks for pulses in Canada, similar to, but perhaps more limited than the major grain crops.

Table 1 gives a supply/demand overview for lentil using the information of Saskatchewan Agriculture modified with the Statistics Canada official production figure for 1992 (which could be revised following the special crops survey). The key figures which are used after compiling a chart such as this are the stocksto-usage ratios which appear at the bottom. If information is incomplete, unreliable, or the crop is not the major crop in the

commodity group it represents, these numbers may not be indicative of prices.

In the case of soybean, however, which is the major oilseed crop, a stocks-to-usage ratio of 8% would indicate very tight supplies with prices rising to the highs associated with periods of drought or extreme shortage. This is because if you divide the year into 12 months, the ending stocks survey is usually taken about one month before the main harvest comes off (August 31 for soybeans, July 31 for lentil), so stocks of only 8% at that time of the year means the crop has been rationed to provide just enough until the next harvest.

Pulse crops are not normally stored from year to year by producers as old crop is usually discounted, so an even tighter ending stocks could be expected during times of short supply. A soybean carryover of 15% or more of usage represents an oversupply and depressed prices. This would be even more true for pulse crops. They can not be rationed as efficiently because they are not traded on a futures market.

My table did not have enough room to extend this chart back for several years. The last time that lentil reached a stocks-to-usage ratio of under 8% was in 1985/86. In 1989/90 they fell to under 11%, and had strong prices up until the spring of 1991 when the ending stocks were estimated to be about 15% of usage. I believe the trade would question whether there were this many lentils being stored at that time because supplies were tight, and neither producers nor processors want to carry lentil supplies when prices are falling. Last year's carryover of 40% was the highest of the past decade.

As far as I can determine the tremendous expansion in lentil acreage has been due to market factors. The poor prices for most grain crops has forced farmers to look for other alternatives. The expansion in lentil production has created a large supply which is unlikely to be sold in traditional food markets due to the poor quality of the 1992 crop.

Buyers are unhappy with the inconsistency in Canadian grading standards which allows the top grade in poor production years to be of lesser quality than in years of better production. The industry may have to address this issue if they want to maintain the markets they have established. Farmers and grain handlers who feel they can salvage their losses by meeting the bare minimum standards of their grade by blending or color sorting will not be helping these markets in the long run. With an anticipated carryover of 67%, much of last year's crop will probably go as food aid or for feed use, even though prices will be much less.

All indications are that producers will be seeding as much acreage to lentil again this year as they did last year, due to the higher prices for the top grades. So the fall in lentil prices is delayed by one year due to the poor harvest, but even as an

optimist I could not expect prices to rise. New crop contract prices for Laird and Eston lentil are both about 13.5 to 14 cents a pound. Grain traders will normally not set a price for producers above the expected long term price, so these prices are understandably low by both current and historical price levels. They are, however, not low given the supply expectations for the coming year, so producers would be wise to take out contracts at these levels.

## Field Peas

With the cool season last year, field peas were one of the more successful crops for growers. In fact above-average yields combined with a near-record seeded area producing a crop of 508,000 tonnes, over 20% more than the previous record crop of 415,000 tonnes produced in 1987. In spite of this the anticipated ending stocks for field peas in the current crop year are only 22% of the anticipated total usage. That indicates that peas are in an oversupply, although not as serious as for lentil. Because most of our field peas of all kinds are sold into the European feed market, it is not likely that the market price will fall much further.

Currently field peas can be sold for new crop contracts at \$4.00 to \$4.65/bu. These prices are low due to the caution of grain traders, and most producers will be looking for about \$5.00/bu before they sell. Growers may expand their pea acreage this year, but it would be unreasonable to expect prices any higher than this.

The European Common Market is changing to a system where subsidies are paid directly to farmers. This could have a substantial effect on Canadian field pea exports to Europe. Exporters have been able to take advantage of an aberration in the European system. Field peas from abroad have been able to compete because the added cost of the current paperwork to access these subsidies has made their local product less competitive when compared to the simplicity of imported feedstuffs. If the European system is simplified it could have a negative effect on Canadian exports to the EEC. Grains would benefit; field pea would not because it is a specialty market.

If farmers are looking for a safe cropping option after a disastrous year with most crops in 1992, then field pea is a reasonable alternative. But no one is likely to get rich producing pulses for a feed market. The food markets for lentil and beans make the prices for these crops much more attractive.

## Fababean

Fababean is similar to field pea in that the general intention was to produce them for the feed protein market in Western Canada. Unfortunately this has limited the sales of fababean for food use in other parts of the world. Fababean could not be produced cheaply enough to compete with field pea, soybean meal, and canola meal as a protein feed. Fababean has been priced, for the most part,

slightly above or close to Century field peas over the past eight years. The only times it was priced lower was during the overproduction years of 1987 and 1988 when they had to be sold into the European feed market, thus competing directly with field pea.

The production of fababean in dryland areas of Western Canada has been generally unsuccessful. They were tried as an alternative crop when grain prices fell after 1986. Only in the irrigation areas has fababean done well enough to compete with field pea and lentil. Unfortunately the killing frost of 1992 affected the late season bean and fababean crops even more than pea and lentil. Companies which were offering as high as 11 cents/lb for fababean contracts in 1992 have suffered and backed off with bids of only 8 1/2 cents/lb this year. This is lower than the long term average grower price of 9 to 9 1/2 cents/lb, so it is unlikely that the fababean area will rise this year.

This does not mean that anyone should be giving up on fababean as a crop alternative. It is a high yielding crop well suited to irrigated areas. What would be of assistance is to develop varieties that are specifically suited for food consumption in other parts of the world. A fababean with a larger seed has better demand in the Middle East where they are used for food. The small seeded type we now grow is preferred for livestock consumption in Europe. However food demand for fababeans in Europe is not great. If larger seeded food varieties were to be developed for production in Western Canada, we could see an expansion in fababean area.

#### Dry Beans

For several years now SIDC has been involved in an effort to establish pinto bean as a crop alternative for irrigation farmers. For many new crops the establishment of marketing channels is often a problem. Pinto bean, however, seems to have encountered more production and harvesting problems. Agronomic research is underway to develop straight cut harvesting technology similar to lentil production, rather than the row cropping and undercutting traditionally used in other dry bean production areas. The traditional methods did not appear to work because farmers were unwilling to invest in the new equipment required for this crop.

Which method of harvest will prove more effective has not been established yet. Although by present comparisons, the traditional methods are more successful with current bean varieties, this does not mean that straight combining will be unsuccessful when more erect varieties are available. I am not qualified to pass judgment on this research initiative, but I would be interested to see another attempt made at row cropping for the sake of comparison. By either method dry bean should be able to compete with other pulse crops in Saskatchewan. One year's disaster should not affect the direction of an industry, but we often allow it to do so.

Table 3 shows the area seeded to dry beans in Canada. The total area sown to dry beans in Ontario is not expanding, although

there has been a movement away from white beans into colored beans. Their bean board (which markets only white beans) is well established and has been successful in lobbying for support prices for their industry. Tri-partite stabilization programs were established for white and colored beans, but have been discontinued in Ontario in favor of GRIP which offered higher prices for beans in that province. In the West there has been a rapid expansion in bean area in Manitoba and Alberta (mostly colored beans). The stability represented by these programs has been a boon to the industry.

The tri-partite stabilization programs should still be available for growers of colored beans in Western Canada. Oddly enough many of the Ontario producers are turning away from dry bean this year in favor of soybeans because of the disaster in last year's harvest which they experienced as well. Other countries in the world are growing more dry beans, while American farmers, similar to the Ontario growers, should favor soybeans. Western Canadian farmers will favor canola, lentil, and field pea.

Although dry bean is the largest of the pulse classes, the multitude of bean classes makes it difficult to compile supply/demand estimates. Nonetheless an estimate based on data provided by the U.S.D.A. is given. There is no official survey of bean stocks in the U.S., so the U.S. Department of Agriculture has been reluctant to publish this data. The record production of 1991 created a huge oversupply of beans in North America, causing prices to fall sharply. A cutback in acreage, and the poor crop of 1992, has brought supplies back to average levels.

Average pinto bean prices are about 24 cents/lb (U.S.). I would expect prices this year to range from about 19 to 30 cents/lb (FOB dealer). These are dealer prices in the U.S. With the exchange rate, and taking off a processing margin of about 6.5 cents/lb, Canadian prices would also be about 24 cents/lb with a low of about 17 cents/lb. Due to the disaster with the North American crop last year I expect that farmers will shy away from beans this spring. That means that production should be cut back further, and with normal yields, prices should rise from these levels.

It may seem odd to you that farmers would turn away from growing what could be their best pulse crop. But that is the history of price cycles. Everything looks worst before the market turns around. An entire philosophy of commodity trading based on price cycles deals with this very concept. Most traders would tell you now that bean prices should be low this year. I anticipate that acreage will drop, but it is unusual for acreage and prices to drop at the same time.

#### Summary

To summarize I expect that all the major pulse crops will continue to play an important role for irrigated and dryland producers in Western Canada. I expect a larger area to be sown to

lentil and field pea, and a smaller area to fababean and dry bean. The large lentil supply creates a price risk, so current contract prices of 13 to 14 cents/lb appear reasonable.

Field pea prices should not go much lower since they have a feed demand, and prices are already low. Farmers are expecting prices of about \$5.00/bu, and I think they would do well to hold out for these levels. I would not grow fababean for under 9 to 10 cents/lb.

Despite farmers being discouraged with the production problems for dry beans, I think this industry should be able to expand in Saskatchewan. I do not expect pinto bean prices to fall as much as lentil prices, and they have a good chance to rise to higher than average levels if acreage drops in the U.S. The timing is also right for a recovery in bean prices. Colored beans could be a rewarding crop for producers who are willing to learn new management techniques. For the weather to co-operate we will all have to appeal to a higher source of knowledge.

Lentil Supply/Demand - Canada

	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
Harvested area:								
(000 acres)	180	323	540	335	255	330	589	690
(000 ha)	73	131	219	136	103	134	238	267
Yield (kg/ha)	855	1301	1308	431	934	1591	1440	1307
Production (000 tonnes)	62	171	287	59	96	213	343	349
Beginning Stocks	9	5	20	81	37	13	30	106
Supply	71	175	307	139	133	226	373	455
Exports	41	109	148	72	88	146	204	185
Seed	13	22	14	10	13	24	28	29
Other Usage	12	24	64	20	19	26	35	58
Total Usage	66	155	226	102	120	196	267	272
Ending Stocks	5	20	81	37	13	30	106	183
Stocks/Usage	8%	13%	36%	36%	11%	15%	40%	67%

Source: Saskatchewan Agriculture and Food, 1992. Specialty Crop Report

Field Pea Supply/Demand - Canada

	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
Harvested area:								
(000 acres)	184	325	585	670	370	305	490	647
(000 ha)	75	131	237	271	150	123	198	262
Yield (kg/ha)	. 2253	1824	1751	1181	1560	2146	2070	1943
Production (000 tonnes)	169	239	415	320	234	264	410	508
Beginning Stocks	39	40	88	94	92	45	22	20
Supply	207	279	503	413	327	309	431	498
Exports	103	103	289	198	177	166	275	275
Seed	25	45	52	28	23	38	50	57
Other Usage	39	43	68	95	82	83	86	75
Total Usage	167	191	409	321	282	287	411	407
Ending Stocks	40	88	94	92	45	22	20	91
Stocks/Usage	24%	46%	23%	29%	16%	8%	5%	22%

Source: Saskatchewan Agriculture and Food, 1992. Specialty Crop Report

Supply/Demand - U.S. Beans ---million pounds---

	1968 to 1972	1973 to 1977	1978 to 1982	1983 to 1987	1988 to 1990	1991/92	1992/93
Average Beginning Stocks	1007	985	890	1180	1036	1500	2156
Average Production	1753	1769	2491	2151	2534	3296	2204
Average Supply	2777	2754	3381	3331	3570	4796	4360
Average Exports	291	366	985	624	836	940	950
Other Usage	1497	1498	1216	1671	1619	1700	1700
Total Usage	1788	1864	2201	2295	2455	2640	2650
Ending Stocks	985	890	1180	1036	1115	2156	1710
Stocks/Usage	55%	48%	54%	45%	45%	82%	65%

Source: U.S. Department of Agriculture, Economic Research Service, "Food Consumption, Prices, and Expenditures, 1968 to 1989", Table 84; and "Vegetables and Specialties, Situtation and Outlook Yearbook", November 1992.