Price Determination

Under most circumstances, a farmer's primary consideration in his decision to hold or sell his canola will be the price he will receive. In order to develop a marketing strategy, you need to be aware of the factors which enter into price determination. While the price for oilseeds is established internationally, there are domestic influences which also contribute to the final price you receive for your canola.

Price is a result of the interaction of supply and demand. Basic economics says that, as long as there is no interference with market forces, demand in excess of supply will drive prices up stimulating more production. Conversely, supply in excess of demand drives prices down, causing decreased production and the possibility of increased demand. Where there is no market interference or artificial barriers, supply and demand always try to seek a balance or equilibrium point. Supply and demand situations can change from day to day, month to month and year to year. For example:

- An exporter makes a sale which requires seed from the country; demand at the company's country points increases.
- There is more supply in September/October when the crop is harvested than in July.
- As world population increases, demand for vegetable oil increases from year to year

One other fact to consider related to supply and demand is price elasticity. Price elasticity is an indicator of what will happen to sales as prices move up or down. If we compare wheat to canola seed, wheat is relatively price inelastic. As there is a limit to the amount of wheat humans can or will consume, a decrease in price will not necessarily stimulate increased demand. However, in the case of vegetable oil, because it is used as a source of food and as a cooking medium, decreased prices will increase demand. People become less conscious of conserving their frying and cooking oils, and consequently use more. In a declining market then, producers are relatively better off with a price elastic commodity than they would be with an inelastic one.

When considering the supply side of the picture it is important to keep in mind not just the year's production but also carryover or carry-in stocks. These are stocks of canola from the previous year's production which have not yet been used. Canadian carryover stocks would consist of canola on hand at the end of the year either on farms or in commercial channels which had not yet been crushed or exported. World carryover stocks consist of all commercial and farm stocks held anywhere in the world. (The level of carryover stocks is a measure of how tight or loose the supply/demand balance is expected to be.) For example, if carryover stocks are high, buyers will bid less aggressively because they know there are ample stocks; sellers will be more willing to sell (within limits), prices will decline.

While carryover stocks are a good indicator of price trends from year to year, they are not that helpful over a longer period of time. This is because carryover stocks alone give no indication of changing consumption patterns over time. A more effective indicator is the stocks/use ratio. This is a measure of the canola carryover as a percent of the annual canola usage. This ratio allows for changes in usage. For example, a carryover of 600,000 tonnes in 1977/78 would have been quite burdensome representing a stocks/use ratio of 36 percent. In 1986/87 that same tonnage would be considered toward the tight side and represents a stocks/use ratio of 15 percent. Therefore, a useful way to measure supply/demand

trends, and gain an indication of future price, is to calculate the stocks/use ratio for the current year and compare that to historical ratios.

Now that we've established that the supply/demand balance is the foundation on which price is based, we're almost ready to take a look at some of the international and domestic factors that can affect price movement in both the short and long term. Before we do that we need to discuss how you, as a canola grower, can follow price movement in order to determine the timing of your canola sales.

No doubt you are familiar with grain and oilseed market or price reports which are broadcast daily or listed in farm publications weekly. You will be familiar with three market prices: futures, cash and street. There is often confusion between the terms cash and street price, and there sometimes is uncertainty as to how the future price is established, and its relationship to the cash and street price.

Futures prices are determined through a bid system at a public commodity exchange. In its most simplistic sense, the futures market allows buyers and sellers to come together to publicly discover what one is willing to pay for a commodity and what the other is willing to sell it at, at some time in the future. Prices rise if domestic and/or international indicators suggest there will be a shortage or improved demand, and prices will fall if oversupply or decreased demand is expected.

The cash price is the price paid for immediate delivery at a given location (spot oilseeds). Most cash prices are quoted for oilseeds at a terminal position (e.g., Vancouver). In a perfect market cash and futures differ by the cost of carrying the canola from the present to the future month. However, because perfect markets are rare, cash prices could be at a discount or premium to the futures price depending on the supply and demand at the current time at the terminal location. In a perfect market situation the cash price will be equal to the futures price during the delivery month.

The street price is the price you receive locally at your elevator, crushing plant, or from the grain dealer. The street and futures prices are related. The spread (or difference) between them is referred to as the basis and it reflects the cost of marketing canola. It includes such costs as elevation. freight, cleaning, storage and interest.

International Factors

The world oilseed market is very complex. Oil World, a German publication which is the Bible of those in the edible oil trade, classes twelve commodities as major sources of edible oils and fats in the world. Not only is edible oil obtained from plant sources, it can be produced from marine and animal sources.

Besides producing vegetable oil, oilseeds also produce meal. Not only does each oilseed have its own unique oil and meal content, but it can also have considerable quality differences. Oil has different fatty acid ratios. Meal has different protein levels. For example canola has an oil content of approximately 41 percent and meal content of 58 percent. Soybeans have an oil content of about 18 percent and a meal content of 80 percent. The protein of canola meal ranges from 35 to 38 percent while soybean meal protein is around 45 percent. All these factors play a role in the level of demand for a particular oilseed at a particular time of the year.

Price levels for world oilseeds are determined by the world demand for their two by-products, oil and meal. Taking into account quality differences, the various oils or meals must remain price competitive with each other. The relative price of any one oilseed will depend to a certain degree on the availability of, and demand for, its oil or meal. However, if the price gets too far out of line, substitution will occur

and bring prices back into line.

Before we look at some of the factors which can be used to predict movements in price levels, it is worth noting that in the 1980's production and export subsidies significantly altered supply patterns in the international marketplace and are one of the leading contributors to depressed prices. Production subsidies present producers with artificially high prices unrelated to the realities of world supply and demand and have led to excess production. In response to increasing stocks, export subsidies have developed in an attempt to artificially stimulate demand. The subsidized exports take market share from traditional exporters. Those exporters which are strong enough react with their own subsidies fueling a trade war. Those countries with limited national treasuries are caught in the middle, facing increased and unfair competition in the world marketplace.

Another factor entered the vegetable oil market in the 1980's which radically altered the price structure for vegetable oils. Malaysian palm oil began to be marketed very aggressively. Changes in production management allowed the Malaysians to put palm oil onto the world market not only at a low price, but in increased volumes. In the early 1980's pollinating insects were introduced to the palm plantations, which increased yields substantially. Prior to this period, high volumes of palm oil entered the marketplace at irregular intervals, depending on precipitation levels. With improved pollination, yield levels appear to have been regulated and now move in a two year cyclical pattern. After a year of high yields, as a result of increased pollination, the palm trees enter a year of semi-dormancy and reduced yields. Every second year then, there is some opportunity for other vegetable oils to move into the palm oil market share.

There is another consideration regarding palm. It is not a meal producing commodity. So not only does it depress prices through increased volumes, but it can cause problems for oilseed crushers who are crushing for meal, by making it more difficult for them to market their "residual" oil.

Generally speaking, canola prices follow soybean prices because of the dominant position of soybeans in the world oilseed market. Soybeans account for about half of the world oilseed production. However the price relationship between soybeans and canola will depend on the relative values of oil and meal. In many years world oilseed crushers crush to meet meal demand. Consequently, oilseeds with a high meal content, like soybeans, are preferred in this situation and canola would trade at a discount. In years when there is a contraction of world livestock numbers, meal demand decreases and high oil bearing seeds like canola are preferred. As a result canola would trade at a premium to soybeans. So when watching the markets you should take a look at the relative change in livestock numbers, as well as any developments in animal feeds which would displace oilseed meal protein.

While the overall price level may be trending up or down for the crop year and the immediate future, occurrences during the year can cause price rallies and declines independent of the overall trend.

Rallies will occur if there is an indication that anticipated production levels of an oilseed crop will not be reached. Declines can occur when harvested crops enter the market or production appears to be more than anticipated. Prices react to news, founded or unfounded.

As the U.S. soybean crop is the predominant contributor to world oilseed supplies, any news about the crop will affect world soybean and canola prices. The U.S. soybean crop year is from September to August. The United States Department of Agriculture (U.S.D.A.) regularly releases crop, stocks and supply demand estimates. The markets will react to these reports if the news is different than expected. For example, if the trade, through market intelligence, estimates that farmers intend to seed 58 million acres, but the U.S.D.A. planting intentions report indicates farmers anticipate only 56 million acres, prices

will rally for the period immediately after the report until other factors, such as weather, start to affect buyers' outlook. Prices may hold or decline.

Early in the crop year, from September to about January, the market tends to concentrate on the final size of the crop just being harvested and the demand prospects. As the crop year advances, traders begin to be increasingly concerned about the size of the upcoming crop. Early in the crop year the market is concerned about the size of the carryover stocks following July 31. From January on, the market concentrates on both carryover stocks in August of the same year and one year later.

Throughout the growing season weather is an important consideration in the movement of prices. You may hear the term "weather" market. That means prices are reacting to changes in weather. Early in the growing season if conditions are dry around seeding time, prices may strengthen in anticipation of lower than expected production. If a generalized rain occurs, prices fall.

In addition to the American soybean situation, there is another factor which impacts soybean prices, and canola prices accordingly. That is the South American soybean crop. South America produces about one third the amount of beans produced by the U.S. That crop is harvested in the February/March period, and is in effect a "second harvest" . Consequently the size and condition of the harvest will impact prices in the late winter. Further, because of the need for foreign exchange, South American suppliers price their beans to sell. They work towards having all their beans sold by September to avoid competing with the U.S. harvest. In effect this leaves the U.S. as a residual supplier to the world. While the South American crop is much smaller than the American, it is of concern to traders. Any increases in production take market share from the U .S., impact prices during the period of the crop's marketing, and add to world inventories by the amount of displaced U.S. exports.

There are a number of other factors which contribute to movement in prices and price trends which are more difficult to monitor for those who are not regular followers of world economics. World economic conditions impact prices. The relative wellbeing of importing nations impacts demand. Relative values of currencies could increase or decrease the demand for a certain oilseed or its products and shift demand to substitutes. Alternatively, currency movement could make other countries competitive in the traditional market of another country. For example, if the American dollar strengthens in comparison to the Japanese yen and Canadian dollar, American soybeans become more expensive for the Japanese . The Japanese tendency in such a situation is to increase canola purchases.

Domestic Factors

While the world marketplace sets the general price trend, and international conditions during the growing season will cause temporary fluctuations, there are also factors specific to Canada which will affect the price of canola on a day to day basis.

As there is a domestic crushing industry in Canada, and because canola is the dominant oil used in this country, canola prices do not necessarily follow a fixed price ratio to soybeans. If Canadian canola supplies are tight there will be a tendency for canola to trade at a premium to soybeans and soybean products.

Localized situations will also affect the price you receive for your canola. For example, you may find that one elevator company is offering a lower or higher price relative to the others. If the price is higher, the company is trying to attract your canola because it has sales for it. It can afford to increase its price (by narrowing the basis) because it has a sale arranged and consequently has a lower carrying cost. If a

company has ample supplies of canola in store and anticipates it will have to carry that canola for a period of time before it can sell it, it will consider the number of months it may have to carry the canola, calculate the cost, and widen its basis accordingly.

If supplies are tight, basis levels tend to be narrow as companies compete to purchase canola to fulfill their market commitments. Ample supplies widen basis. This can occur, in particular, at harvest time when there is substantial canola available. As commercial channels fill, the basis may widen to discourage further deliveries until the product can be exported or processed.

Basis also tends to narrow in periods of low prices because farmers become reluctant sellers. They become willing to carry their canola in expectation of improved prices. In order to attract canola supplies, companies with sales commitments offer the farmer more by narrowing the basis. As well, the cost of carrying company-held canola is less as prices decline, so this will affect basis.