

WHAT WILL THE MARKET PLACE EXPECT FROM SUNFLOWER?

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ABSTRACT

The dramatic growth of sunflower cropping in some grain producing countries over recent years has been partially offset by a stagnant and even decreasing production in USSR, however Australia has not participated in this expansion to the degree it could. Pricing relationship between sunflower oil and the other edible oils such as soy, rapeseed and cottonseed will narrow and, in fact, disappear with each oil competing for market share primarily on the same price plane and without a monetary premium characteristic.

INTRODUCTION

The last ten years were explosive years, not only in terms of world political affairs, but, possibly of great impact, in commodities. In fact the 1970s could best be described as the Commodity Decade since, from that period, an entirely new pattern of trading has emerged involving new fundamentals but such that are still related to the basics of supply and demand.

The role and fortunes of individual commodities have varied considerably as have their prices and there now exists a much closer and entwined relationship between commodities. Since 1972, petroleum oil, coarse grains, wheat, gold, silver, currencies and soybeans have all had market place prominence at some point of time or another; acting independently on occasions or reacting on others to like or dissimilar commodities.

The vegetable oil industry has experienced incredible expansion within developing and developed countries — the palm oil industry in Malaysia, the Canadian Rapeseed/Canola development, the continuing expansion of the USA soybean industry and the emergence to maturity of that country's sunflower programme, the increased involvement in the world scene of the Argentine and Brazil oilseed industries and of much less significance in world terms but of primary importance here is the increased interest and cropping of oilseeds in Australia.

Sunflowers in the world market.

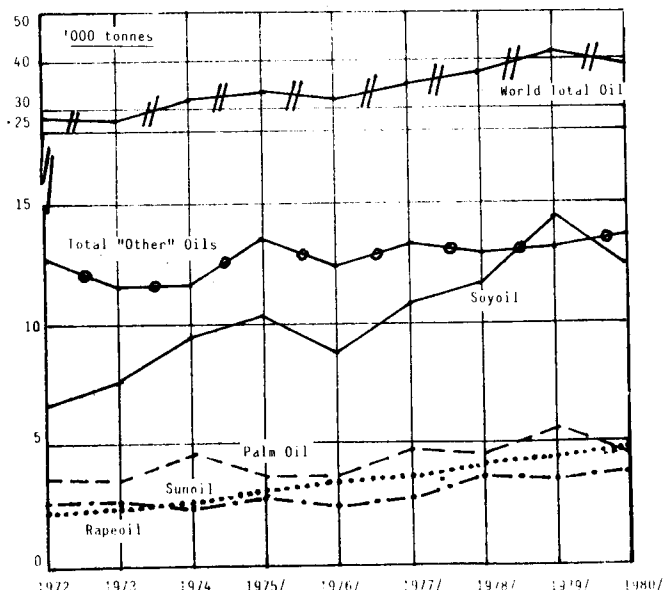
Sunflowers are the third largest provider of edible oil in the World after the soybean and palm oils, the latter having just displaced sunflower oil from second position but possibly only temporarily if USSR, the world's largest producer of sunflower seed, recovers its production potential and has more beneficial harvests. The following graph relates sunflower oil, in world production terms, to other major edible oils and to total edible oil production over the past nine years.

(1)

Production (1) over the review period has risen by 40% but the bulk of the increase has come from soybean oil (up 80%) with palm oil reflecting an 118% increase, rapeseed oil 45% and sunflower oil up 25%; however these increases are more dramatic when studied in the context of production increases for specific geographic areas.

For example, the Soybean harvest (2) in USA over the past six years has risen by 17% but in the same period the increase in Argentina was almost 460%, Brazil 43% and Paraguay 146%; however currently USA supplies 60% of the world supplies with the other three nominated countries supplying 25%. The 17% increase in USA represented 7.34 million tonnes compared with the combined Argentina, Brazil and Paraguay increase of 8.22 million tonnes.

The increase in availability (3) of sunflower seed over a similar period was 42%; almost the same percentage increase as soybeans, but whereas that crop increased by 22.5 million tonnes, the sunflower crop tonnage increase was 4.2 million tonnes — 20% of the soybean tonnage increase. (World soybean production is currently around 82 million tonnes v 15 million tonnes of sunflower seed.) During this period,



however, production of sunflower seed in USSR, which is the largest producer in the world, fell from 5 300 tonnes in 1976/77 to 4 650 tonnes in 1980/81 — a recovery is projected for 1981/82 to 5 150 tonnes — hence the growth of the sunflower industry in other areas has had to contend with this offsetting factor. Expansion of sunflower production in other geographic areas is shown in the following table:—

Sunflower seed production — '000 tonnes

	1976/77	1980/81	% Change
Western Europe	428	774	+ 81
Eastern Europe	1615	1942	+ 20
USSR	5277	4652	- 12
South Africa	255	329	+ 29
Canada	24	166	+ 592
USA	499	1816	+ 264
Mexico	2	25	+ 1150
Argentine	900	1260	+ 40
Brazil	1	23	+ 2200
China	100	960	+ 860
India	20	175	+ 775
Others	774	981	+ 27
Australia	75	137	+ 83

In summary, over the past five years the oil availability increases for the four major oils has been:—

'000 Tonnes	1976/77	1980/81	% Change
Soybean oil	8838	12364	+ 40
Palm	3371	4682	+ 39
Sunflower	3737	4575	+ 22
Rapeseed	2485	3772	+ 52

and obviously the performance of sunflower oil has been hampered by the 12% fall in the USSR production, which country accounts for 32% of the current world production and hence a reduced harvest of that magnitude in USSR has a significant effect on performance and comparative data.

Sunflower in the Australian market.

Sunflower oil usage in Australia received a major boost in the mid 1970s when increasing demand for poly unsaturated margarine with a corresponding decrease in butter usage

resulted from the virtual removal of State quotas controlling the volume of table margarine permitted to be produced. The quota system was abolished in some States of the Commonwealth of Australia but retained in others, however under a section of the Australian Constitution, trade between States cannot be restricted, hence a non quota State can produce and sell into a quota controlled State.

Fanned by the health consciousness of many Australian users of fats and oils, polyunsaturated table margarine today is a major component of the Australian diet and at the expense of animal fats. As a consequence sunflower oil is the oil in greatest demand in Australia; in rounded figures, Australia's annual consumption of vegetable oil provides a tabulation as under—

Australian usage of vegetable oils	
Sunflower oil	45,000
Soybean oil	35,000
Palm oil	24,000
Rapeseed oil	20,000
Coconut oil	18,000
Cottonseed oil	16,000
Other oils	12,000
Total all oils	170,000 Tonnes

In relation to Australian usage a high proportion, if not all, of the soybean oil, rapeseed oil and possibly cottonseed oil could be replaced with sunflower oil assuming price of each is at the same level. Palm oil is not within this group since imports are not dutiable at 10% of the F.O.B. value as applies to soy, sunflower, safflower, cottonseed, maize oils, etc. but excluding rapeseed oil of Canadian origin which enjoys a preferential rate of duty (equivalent at today's prices of oil to approximately 5% compared to 10% although the rate of duty is not expressed in that manner.)

Sunflower growing in Australia should be a preferred crop because of the extensive areas of the country for which growing is suitable and to the climate and conditions which allows sowing to occur from around August through to May depending on area. Such a pattern provides extended intake advantages to the crusher in terms of payment and crop storage aspects, however a minor disadvantage is that the early crop November—January harvest is usually low in linoleic acid and since it is customary in the Australian market for sunflower oil to be sold at a minimum 62% linoleic acid content, the early crop oil does not meet this specification and hence is unsuitable for use in the manufacture of polyunsaturated margarine.

Because of the extensive Australian sunflower growing areas, a major problem which confronts the industry here is the high internal freight rates on seed from farm to mill or, in some instances, to seaport. For this reason Australia has the potential to be a major exporter of sunflower seed whilst still being an importer of oils which could be substituted for by sunflower oil; it is all a matter of economics.

Sunflower's future in Australia.

The preceding brief summary of sunflower in the world and in Australia was to provide a thumbnail sketch of the current situation; to provide a backdrop for the scenario now to be developed in this and the following sections.

In the author's opinion it is obvious from the data recorded that three of the major grain producing and exporting countries of the world, viz. United States, Canada and Argentina, have expanded their oilseed growing operations extensively and not at the expense of their traditional grain growing programmes. Unfortunately the pattern has not been reflected in Australia's development in relation to its oilseed industry. There is no doubt that this country has the land and the potential to expand its slow growing industry, what appears to be lacking is a wholehearted effort by all involved to do so. In some respects the Australian agricultural scene is very conservative but we have had great success in developing a vast number of statutory marketing authorities not warranted for some commodities at the current volume of production but hopefully geared to handle a major volume for both domestic and export markets at the appropriate time.

The author believes we have in Australia now —

- the potential for rapid expansion of oilseed cropping
- the sunflower varieties to provide the farmer with an equitable, compared with other competition crops, return

- the crushing capacity to handle immediately a 50% increase in volume

but unfortunately we lack —

- a growing domestic market for oil, however we have a high volume of imports of other oils which could be substituted with domestic sunflower oil
- an understanding and trust between grower, processor and user of the oil and protein components
- the will to build an industry even in the face of problems of yield, droughts, high transport costs, high labour costs and competition, many of which problems have been faced and overcome by other countries
- a truly co-ordinated research and development programme to provide the farmer with a seed to grow, the products from which meet the requirements of the buyer.

The world commodity pricing structure revolves around the supply and demand market place supported or assisted by commodity exchanges. The only exchange which has passed the test of time in terms of oleaginous commodities is the Chicago Board of Trade Soybean Complex Futures but this is not adequate to cater for the needs of other oil bearing commodities or other oils and proteins. Nor does it assist greatly in markets in the opposite hemisphere to Chicago.

We have seen the effect of the prohibition of exports on the soy futures market, of the petroleum oil cartels on the futures markets, of embargos, of droughts, of gold, of currencies and many other indirectly related commercial actions. We will experience more of these in the future as food will again at some time be used as a weapon.

Perhaps it is timely to question the value of using the futures markets as hedging mechanisms since the fundamentals vary widely, are frequently added to and no longer relate simply to supply, demand and weather. If the value of the futures market stands up to scrutiny in this context, is it adequate for the needs of the multiplicity of the oilseeds markets or offset hedging, e.g. sunflower on the soy complex, or rapeseed oil against soybean and finally is it of assistance to the Australian industry with its limitations and problems of different fundamentals.

Sunflower's future in the world.

So much for Australia — how long will sunflower oil continue to command a premium over soybean oil. Such premium has ranged from US\$200 PTe to a discount of US\$20 per tonne. Currently a reasonable premium appears to approximate US\$60 per tonne but if the cropping of sunflower continues to expand in the USA, and other major producing countries, at the same rate as over the past few years how long can a premium be maintained over soybean.

An industry can only grow if it is profitable for all participants in the industry — each must establish his role or contribution in relation to others and to competitive crops.

This could mean further research into varieties to improve oil content, yield per acre, growing and maturing rates and other characteristics to provide a better increase per acre. Research should be directed to these areas rather than the use of vegetable oil as an alternative fuel which might be "currently popular" in research priorities to influence availability of funds but detracts from the continually increasing need for food for the World's population.

We have successfully developed the black sunflower seed for oil from the stripped sunflower seed used for confectionery and for birdseed. To extend the usage of sunflower protein after the extraction of oil, perhaps we should be aiming to develop a white sunflower seed — having apparently bred, from the stripped seed, narrower white stripes to achieve a black seed, is it too difficult to breed a seed with wider white stripes and narrower black stripes?

CONCLUSION

Australia has the potential to and will eventually become a major world exporter of sunflower seed, certainly from Queensland. Concurrent with expansion into the export market, the domestic market could utilise at least an increase of 50% in oil usage but to achieve this sunflower oil would need to be price tied to soybean oil irrespective of this occurring on world markets.

There exists a greater area of land for cropping of sunflower seed whereas irrigated land in Australia required for soybean and cottonseed production is limited.

Australia is well blessed with protein supplies of both

vegetable and animal origin and whilst considerable tonnages of animal protein are currently exported, this will in future be supplemented with vegetable protein.

The formation of the Australian Sunflower Association has done much to encourage interest in the growing of sunflowers in this country since it brings together those with specialist skills and knowledge with the desire to impart the information to farmers wishing to diversify and be less dependent on wheat or coarse grains. However the Association can only continue to be successful if those in the industry want an

industry and are prepared to contribute to another major Australian industry with almost endless opportunity.

LITERATURE CITED

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