

# Sunflower

*Sunflower article has been written by Larry Kleingartner, Executive Director of the National Sunflower Association (USA) - [www.sunflowernsa.com](http://www.sunflowernsa.com)*

The history of world sunflower production in the last 20 years has been directly related to the political changes in the Soviet Union. The former Soviet Union was the largest producer of sunflower seed and also the largest consumer of sunflower oil. It was also a leader in the research and development of the crop. However, in the last few years, Argentina has become the largest producer of sunflower seed and international based seed companies have taken the hybrid seed and new genetics to all corners of the earth.

The decline in sunflower production in the former Soviet Union regions has limited the growth of sunflower as it relates to other oilseeds. From 1992/93 to 1997/98, the world's growth in sunflower production was just under 9 percent. This compares poorly to the other major oilseed crops, such as rapeseed's 24 percent growth and soybean's 23 percent growth.

However, the changing role of country production has not impacted the volume of sunflower oil exports as dramatically when compared to the other oilseeds. The percentage increase of sunflower oil exports during the five year period of 1992/93 to 1997/98 was 39 percent, compared to rape oil of 42 percent and soybean oil of 48 percent. The difference, of course, is that Argentina and the US export a majority of the sunflower oil that they produce; the former Soviet Union only exported limited volumes to several of their trading partners, such as Cuba.

## **The Impact of Market Economies**

What is the potential impact on sunflower production as more countries switch to market economies? Today, more and more of the world's farmers are being given flexibility to plant crops according to market signals and environmental factors. Plant breeders are also providing new and better planting seeds for a variety of crops, especially in the hybridised crops. In the US, for instance, sunflower is being planted in more arid areas of the country compared to ten years ago. The situation is somewhat similar in Argentina where soybean has pushed sunflower out of the higher rainfall areas. In many arid areas of the US, farmers planted one crop, mainly wheat, and then idled the land the next year in what was called "fallow". Today, the concept of fallow or idling land is not economically feasible. Through a reduction of tillage and better use of herbicides and fertilisers, farmers are continuously cropping their land. Sunflower works well in rotation with wheat in these arid areas. The situation is again similar in parts of Argentina. Both are examples of market functions.

It is likely that the same situation will occur in Western and Eastern Europe and in Russia if market forces continue to gain political favour. As high protein meal demands increase in Eastern Europe and Russia, soybean acreage is likely to increase at the expense of sunflower. However, the expansion of sunflower (the more arid crop) is likely to expand into arid areas of Russia. Rapeseed has already enjoyed growth in these areas and that is likely to continue, possibly again at the expense of sunflower in some of the higher rainfall and humidity areas.

## **Changes in the Importing Markets**

As changes are occurring in the production side, the same thing is happening in the importing countries. Sunflower oil used to enjoy the same price premiums as soybean and rapeseed in the world market, largely because several large importers specified sunflower oil in their tenders. That was largely a function of a number of North African countries. These countries depended on central buying agencies to purchase raw materials and most of the agencies bought either sunflower or cotton oil. In the early 1980s, one Egyptian government buyer of vegetable oil had a simple message "we buy sunflower oil if it is 7 percent cheaper than cotton oil". Other oils were not considered because they gave off offensive odours when heated which led to trouble in the

streets and, eventually, the buyer's job. Most of the central buying agencies have been replaced by the private sector who depend on their bottom line when buying vegetable oils. The same situation occurred in Mexico during the era of Conosupo, the central government buying agency. When Conosupo decided it wanted to buy sunflower seed from the US, it did not look to Chicago soybean oil futures prices. The agency simply bid the sunflower price high enough in the States to get the required amount.

In the early 1980s, the US crushing plants loaded their sunflower seed on rail cars for Mexico; the margins being better to ship to Mexico and close the plants in the US. The situation is very different today, with Mexico's private businessmen competing in the world market. However, the net result of this change to a market economy is that sunflower oil has lost its consistent premium. The premium does still occur but, today, it is a function of supply and demand. In fact, the potential record sunflower crop in Argentina this year will likely push world sunflower oil prices under soybean oil values.

### **What is the Direction of Sunflower in the Future?**

It has already been indicated that sunflower is likely to be grown in the more arid areas of the world and it is believed that this trend will accelerate over the next ten years. The next trend will be to find a higher value in sunflower oil in the market place. It is unlikely that most of the world's sunflower producers can profitably produce this crop and compete with palm and soybean oil in the world market as the cheapest bulk oil. This will be accelerated as import tariffs on vegetable oil are reduced through world trade agreements. However, consumers are also growing more sensitive to altered fatty acid structure for health purposes and continue to be discriminating in their taste preferences. The growing middle class consumers around the world are watching food labels and making their purchases according to their taste and health requirements. A good example is India. Sunflower oil has gained a considerable and consistent market share, based on taste and health perception.

A number of fatty acid alterations have been made on sunflower oil over the years. Oleic acid values have been increased to make it more stable; the higher oleic acid also differentiates sunflower oil from other high linoleic acid oils such as soybean. More and new developments in sunflower oil are expected.

Other generic work is going on in sunflower. As with the major crops, gene transfer is indeed possible in sunflower. Despite consumer concerns in several countries, it is this science that can reduce some of the serious production problems in sunflower. The sunflower crop must have the same opportunity for new technology as other crops, as this is the only way in which it can compete for acreage in the international market place and remain a viable crop for the world's farmers.