

## **VARIATIONS IN THE INTERNATIONAL AND DOMESTIC PRICES OF COCONUT OIL**

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### **ABSTRACT**

Variations in the international prices of coconut oil , for the period 1970 to 1999 were looked into. During this period , the prices showed a marginal rising trend , but the period from 1970 to 1985 was marked by violent fluctuations in prices. The fluctuations in prices had very little relationship with the changes in coconut production, but was found to move in sympathy with that of other vegetable oils like soybean oil, palm oil and sun flower oil. Comparison of domestic prices (1977-98) showed similar trends in the major producing countries like India, Indonesia and Philippines . In both India and Indonesia , domestic prices of coconut oil was found to have positive correlation with coconut production while in Philippines, only the expected negative correlation between coconut oil prices and coconut production was noticed. In the case of India, coconut oil prices were found to have positive correlation, even with the production of copra and coconut oil , but this was negative and weak for Indonesia and Philippines. Seasonal variations in prices in producing countries were also looked into.

### **INTRODUCTION**

During 1998, world production of coconut was estimated to be 51181 million nuts, from 11.9 million ha. Now Indonesia is the largest producer in the world, closely followed by India and Philippines, and together they account for nearly three-fourth of the total production. Annual coconut oil production in the world is around 3.58 million tons, accounting for about 5 percent of the total production of vegetable oils in the world. About 42 percent of this comes from Philippines, 14 percent is from Indonesia, while India's share is about 12 percent. Other important coconut producing countries are Vietnam, Sri Lanka, Thailand and Malaysia. In this paper, an attempt has been made to look into the fluctuations in the prices in the international markets. Variations in the domestic prices of coconut oil were also looked into for the major producing countries.

### **MATERIALS AND METHODS**

Data available for the period 1970 to 1999, for the international prices of coconut oil (US \$/MT, Philippines /Indonesia, CIFRott.) were looked

into, to study the fluctuations in prices. Its relationship with the production trends of coconuts, and price trends of other vegetable oils was also looked into using correlation and regression methods. Similar exercise was also done for the major producing countries like Indonesia, India and Philippines. Since domestic prices of coconut oil are expressed in local currencies, for the purpose of comparison, they were converted to index numbers, considering the price for 1980 as the base year. Seasonal variations in the international prices of coconut oil and other oils were also compared using the monthly price data for 1996 to 1999.

### **RESULTS AND DISCUSSION**

In the international markets, prices of both coconut oil and copra move in a closely related manner. Coconut oil being the end produce, its price generally move independently, and copra prices are dependent on this. Copra prices are generally around two-third of the coconut oil prices. During the early 70s, this was less than 60% only, but during the period 1975 - 96, this was in the range of 65 to 70 percent (Table 1).

Variation in coconut oil prices

**Table 1. Fluctuations in the prices of copra, coconut oil and other major vegetable oils in the international markets (1970-99)**

Oil/Oilseed	C.V. (%)	Ave. increase US \$ / MT	Coeff. of correlation with prices of coc. oil
Copra	36.3	2.75	0.992
Coconut oil	35.9	4.04	...
Soybean oil	26.1	2.05	0.853
Palm oil	30.5	3.07	0.901
Palm kernel oil	37.2	1.78	0.991

The coconut oil prices, which was around US\$ 350 to 400 in the early 70s have reached around US\$ 700, by the end of 90s. Though prices showed fluctuation, the average annual growth rate was around US\$ 4.04/ton. And this was one of the highest, when compared with other major vegetable oils. Year to year fluctuations in prices was also one of the highest, as revealed in CV (%). During the past two decades, the prices have not shown out substantial improvement. During 1970 to 84, coconut prices showed an average increase of US\$ 33.73/M.T, but this period was conspicuous for the violent fluctuations. During 1985 - 99, the average annual increase was US\$ 21.98/M.T. only. Though the high prices recorded in 1974, 1979 and 1984 and the low prices obtained in the immediately succeeding years is related to the fluctuations in production and the general trend in the prices of coconut oil (1977 - 98) had very little to do with the coconut production. But the total production of copra and coconut oil had a strong relationship with coconut oil prices. In the case of major vegetable oils like soybean oil, palm oil, palm kernel oil and sunflower oil, the movement of prices in the international markets have been more or less in the tune with that of coconut oil. Jump in prices have been noticed in 1974, 1979 and 1984 in the case of all vegetable oils, which is attributed to adverse weather factors and consequent fall in production. However, the amplitude of the fluctuations observed in 1979 and 1984 for coconut oil were of a higher magnitude than in the case of other vegetable

oils. This is because of the special position coconut oil occupies.

Recent trends in the prices of coconut oil and other vegetable oils were also looked into, by taking the monthly average prices in the international market for the period January 1999 to August 2000. A general declining trend in prices was noticed in the case of all vegetable oils. This decline had been almost steady since May 1999. This is due to the increase in coconut oil production in Philippines and Indonesia during this period. Steady increase in the production of palm oil in Malaysia, Indonesia and other countries has also contributed to this. The decline in prices has been more prominent in the case of coconut oil. The average price for coconut oil during June, July and August of the current year is 41 percent less than what was observed in the corresponding period last year, while for the other oils, this decrease was in the range of 12 to 22. In the Philippines the recovery of production has been translated into high export volumes, especially starting April this year. The cumulative exports during the first half of the current year is reported to be more than double that of the corresponding period in the previous year. From Indonesia also, the exports are at least 25 percent more. In addition to this, for most of vegetable oils, the prices during the second half of the year is generally below average (Table. 2). This also has contributed to the low prices prevailing now. Variations in the domestic price of coconut oil for the period 1980-98 have also been looked into for the major producing countries, viz. Indonesia, India and Philippines. The movement of prices over the years was almost similar, with upward trend in prices during 1984, 1988, 1992 and 1996. However, this four year cycles for higher prices has not been observed in 2000. During 1998 and 1999, the increase in prices had been substantial for Indonesia and Philippines (Table3).

An attempt was also made to compare the domestic price of coconut oil in Indonesia and India and Philippines, for the triennium ending 1989 and 1999, by converting them to a common currency, namely the US\$ at the exchange rates prevailing in the respective years. In both Indonesia and Philippines, the prices were almost on par, and the increase during the decade was

**Table 2. Seasonal variations in international prices of major vegetable oils and domestic prices of coconut oil (1996-99)**

Month	International prices (US\$/MT)				
	Coconut Oil	Soyabean Oil	Palm Oil	Palm Kernel Oil	Sunflower Oil
Jan	100	104	108	101	100
Feb	100	101	106	102	97
Mar	98	100	103	98	98
April	104	102	107	104	106
May	108	103	105	108	110
June	103	99	95	100	103
July	96	96	90	94	102
Aug	95	97	94	97	98
Sept.	96	99	99	98	94
Oct	98	99	99	98	96
Nov.	101	101	99	100	99
Dec	101	99	98	101	96
Ave	701	543	546	690	599

(US \$/MT)

also similar, while in the case of India, a sharp decline in price was noticed during this period. This is not unexpected because the prices during the late 80s were almost four times higher than in the major producing countries. The present study has revealed that the coconut oil price in the international market is dependent on the production of copra and coconut oil. Prices of all vegetable oils are highly interrelated. Sudden increase in the production of coconut oil and consequent increase in the export as well as increased production of palm oil and its availability at a cheaper rate has resulted in the downward

**Table 3. Index numbers for international and domestic prices of coconut oil (base year 1980 = 100)**

Year	International Prices	Domestic Prices	
	India	Indonesia	Philippines
1980	100	100	100
1981	85	92	121
1982	69	94	101
1983	108	137	141
1984	171	219	224
1985	88	137	154
1986	44	143	147
1987	66	205	191
1988	84	209	249
1989	77	160	239
1990	50	180	167
1991	64	263	220
1992	86	300	290
1993	67	259	244
1994	90	214	337
1995	100	229	420
1996	112	294	453
1997	97	347	439
1998	98	291	1260
1999	109	360	1309
Ave.	5.68	12.35	42.31
increase			26.54

trend in the prices of coconut oil during the current year. Increase in the price of coconut oil in India and Indonesia, along with increase in production was noticed. During the past one decade, while the international prices and domestic prices in Indonesia and Philippines showed marginal increase, in India, the prices had fallen.