

MOVEMENT OF WHOLESALE PRICES OF COCONUTS, COPRA AND COCONUT OIL IN KERALA DURING THE LAST TWO AND HALF DECADES*

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ABSTRACT

This study reveals the highly erratic nature of movement of wholesale prices of coconuts, copra and coconut oil in respect of Calicut market which reflects the situation of entire Kerala State. The violent fluctuations in these prices are found to be for more than one reason. The major factor behind this is the uncertainty of weather which leads to the volatility in the supply-demand gap in the edible oil sector in general and coconut oil sector in particular. While the prospects of improved supplies of oilseeds and oils following favourable weather, liberal imports, lower tariff values and anti-inflationary measures favour the lowering of prices, the unfavourable weather, restricted imports, higher tariff values, inflationary spiral, and black economy push the prices forward. Easy availability of comparatively cheaper substitutes to coconut oil both in the edible and non-edible sectors appears to have made coconut oil noncompetitive, thus vulnerable to crash in prices in favourable years of production. For evading the present crisis of slump in coconut sector it is suggested to develop technology on the alternative use of coconuts, to extend the support price or market intervention price system to milling copra and to adopt scientific coconut farming system which will ultimately bring desired cost effectiveness in coconut through increased productivity.

INTRODUCTION

Coconut being a smallholder perennial crop it needs price stability as a pre-requisite for its steady growth, because of its inability to short-run adjustment to price fluctuations unlike the seasonal and annual crops. In the absence of a firm price stabilisation programme this crop has been trapped in vicious circle—low investment—low productivity—low return—low investment and so on. The characteristic uncertainty in the prices of coconuts and their

products *viz.*, copra and coconut oil has been causing worry to the coconut growers and those concerned with the development of this crop. An attempt has been made in this paper to identify the plausible reasons for violent price fluctuations in coconuts, copra and coconut oil in Kerala during the last two and a half decades.

MATERIALS AND METHODS

The main part of this study covers the period 1960-61 to 1984-85. The

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data utilised for this work come from secondary sources. While the Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, New Delhi had provided the data in respect of production of coconuts in Kerala, Tamil Nadu and Karnataka States along with India as a whole; the information on the production of copra in India and wholesale prices of coconuts, copra and coconut oil in respect of Calicut market were obtained from the Statistical cell of the Coconut Development Board, Ministry of Agriculture, Government of India, Cochin. The statistics on the production of oilseeds and edible oils in India were collected from the Directorate of Oilseeds Development, Ministry of Agriculture, Government of India, Hyderabad and on the imports of edible oils were collected from different Government publications. The index numbers for the wholesale prices of coconuts, copra and coconut oil were constructed considering 1970-71 as the base year. Besides the interpretation of relevant Time-Series data, the commodity reviews published periodically in the Journals viz., *Agricultural Situation in India*, *Coconut Bulletin* issues from 1960 to 1964, *Indian Coconut Journal* from 1965 to 1984 and Reports on Kerala Economic Surveys provide insight into the causes of price fluctuations, in different periods.

RESULTS AND DISCUSSION

Table I presents the average annual wholesale prices of coconuts, copra and coconut oil in respect of Calicut market for the period 1960-61 to 1984-85. In this Table widely fluctuating tendency of the wholesale prices of coconuts and their products under review is clearly

evident. Though these prices have been expressed here in their 'absolute term' in which they carry with them components such as irregular and cyclic variables apart from the trend, yet the price behaviour of this nature as such could be considered as highly erratic and violent.

In order to find out the reasons for wide fluctuation in the price of coconut, copra and coconut oil one has to refer to the Tables II, III and IV concurrently.

During the year 1960-61 the prices of coconuts, copra and coconut oil edged up from their previous levels on account of increased demand for coconut oil from upcountry consumer markets. These prices however, eased mildly during the following year due to slightly reduced demand from north Indian markets following good harvest of seasonal oilseed crops, but rose steadily thereafter upto 1964-65 keeping pace with the general rise in prices of agricultural commodities.

In the year 1965-66, the prices of coconuts and their products sprang up due to supply volatility. The imports of copra and coconut oil, in oil term, were reduced by nearly 41 per cent from an average of 56,000 tonnes in the preceding four years to 33,000 tonnes in 1965-66, while the indigenous productions continued to remain almost at the old levels. Production of other edible oils was severely affected due to poor harvest of seasonal edible oilseeds. The non-availability of tallow and soyabean oil under PL 480 had also resulted some pressure on the demand for coconut oil. This oil was wanted to fill up the gap created by tallow in the

Table I. *Average annual wholesale prices of coconuts, copra and coconut oil in respect of Calicut market during 1960-61 to 1984-85*

Year	Wholesale prices of			Index numbers of wholesale prices (Base 1970-71)		
	Coconut (Rs./1000 nuts)	Copra (Rs./tonne)	Coconut oil (Rs./tonne)	Coconut	Copra	Coconut oil
1960-61	186	1600	2450	32	35	38
1961-62	180	1550	2310	31	34	33
1962-63	208	1860	2780	36	41	40
1963-64	229	1860	2790	40	41	40
1964-65	244	1970	2930	42	43	42
1965-66	379	3060	4690	66	67	67
1966-67	338	2940	4490	59	64	64
1967-68	418	3470	5220	72	76	75
1968-69	363	3110	4640	63	68	66
1969-70	417	3580	5550	72	78	79
1970-71	577	4590	7000	100	100	100
1971-72	416	3380	5400	72	74	77
1972-73	495	3660	5650	86	80	81
1973-74	805	6480	10200	139	142	146
1974-75	864	7030	11670	150	153	167
1975-76	654	5040	7980	113	110	114
1976-77	819	6650	10560	142	145	131
1977-78	937	8060	11010	162	176	157
1978-79	1000	8680	11780	173	189	168
1979-80	928	8560	12190	161	186	174
1980-81	1158	11610	15770	201	253	225
1981-82	1137	8920	13190	197	194	188
1982-83	1271	10210	15420	220	222	220
1983-84	2493	15880	23840	432	346	341
1984-85	2602	21820	32400	451	475	463
1985-86	1251	12530	18780	217	273	268

(upto Aug. 85)

soap manufacturing units and to allow the diversion of other edible oils to fill up the similar gap created by soyabean oil in the *vanaspati* (hydrogenated vegetable oil) industry. During that year, the State Trading Corporation (STC) had also increased the premium on coconut oil and the Sri Lanka Government had enhanced the export duty on copra. All these factors individually as well as collectively caused the prices of coconuts and their products to shoot up to a new height.

During 1966-67, the prices under question shaded to a considerable extent because of the trade slump following the imposition of credit control by the Reserve Bank of India. The severe power cut to the industrial units by the Kerala State Electricity Board also adversely affected the demand for copra by the crushing units and in turn the demand for coconuts by the copra makers. This situation was, however, short lived as the coconut oil market became buoyant in 1967-68 because of

Table II. *Production of coconuts in Kerala, Tamil Nadu and Karnataka States and in India during 1960-61 to 1983-84*

Year	Production of nuts (In million)				
	Kerala	Tamil Nadu	Karnataka	Other States & Union Territories	India
1960-61	3220	448	498	473	4639
1961-62	3247	445	437	649	4778
1962-63	3305	912	400	400	5017
1963-64	3262	668	353	442	4725
1964-65	3278	791	460	514	5043
1965-66	3293	844	362	536	5035
1966-67	3425	866	446	455	5192
1967-68	3593	867	448	413	5321
1968-69	3843	735	484	484	5546
1969-70	3956	873	610	420	5859
1970-71	3981	941	732	421	6075
1971-72	4054	977	638	455	6124
1972-73	3921	932	659	485	5997
1973-74	3703	943	730	475	5851
1974-75	3719	1091	720	500	6030
1975-76	3440	1099	767	523	5829
1976-77	3348	1095	803	519	5765
1977-78	3053	1039	810	511	5413
1978-79	3237	1123	855	515	5730
1979-80	3032	1154	873	577	5636
1980-81	3036	1132	884	668	5720
1981-82	3006	1019	898	650	5573
1982-83	3184	1650	930	592	6356
1983-84	2695	1402	966	808	5871

he delayed effect of the power cut on coconut oil supply despite considerable improvement in the production of edible oil. Since there was no carry over of the stock from the previous year because of the countrywide droughts of 1965-66 and 1966-67 and there was a unusual time lag between the production and supply of edible oils in the country, higher level of supply in edible oils failed to influence the price of coconut oil. The prices of these commodities ruled subdued during 1968-69 due to the expectation of good crop of coconuts in the country following favourable monsoon. These prices were

again pushed up significantly in 1969-70 as a result of the overall shortage of edible oils consequent to bad monsoon and speculative buying, despite good harvest of coconuts in Kerala and other parts of the country.

In the year 1970-71, the prices ruled very high in spite of the fact that the production of coconuts had further improved and the year was notable for good crop of oilseeds. The significant rise in these prices was due to the fact that the market arrival of coconuts and copra was considerably affected in Kerala in the wake of socio-economic

Table III. *Production of copra and other important oilseeds in India during 1960-61 to 1983-84*

Year	Production in '000 Tonnes				
	Copra	Groundnut	Rapeseed mustard	Sesamum	Cottonseed
1960-61	275	4812	1347	318	1865
1961-62	265	4994	1346	372	1614
1962-63	275	5064	1303	492	1842
1963-64	282	5298	915	439	1912
1964-65	293	6004	1474	484	2000
1965-66	309	4263	1298	424	1614
1966-67	317	4411	1228	416	1803
1967-68	330	5731	1568	445	1967
1968-69	349	4631	1347	422	1848
1969-70	362	5130	1564	448	1890
1970-71	365	6111	1976	562	1621
1971-72	357	6181	1433	449	2363
1972-73	349	4092	1808	385	1950
1973-74	359	5932	1704	485	2146
1974-75	365	5111	2252	392	2439
1975-76	354	6754	1936	479	2027
1976-77	377	5264	1550	422	1987
1977-78	367	6087	1650	520	2483
1978-79	370	6208	1860	514	2714
1979-80	375	5768	1428	348	2643
1980-81	376	5005	2002	445	2307
1981-82	350	7230	2362	524	2713
1982-83	375	5553	2472	502	2660
1983-84	346 (p)	7284	2566	618	2238

P = Provisional

implications of the Kerala Land Reforms Act of 1969. Moreover, the policy liberalisation of export of *vanaspati* on one hand and drastic cut in the import of tallow on the other hand contributed to the upward swing of these prices.

An easier trend in the prices of the commodities under question was the feature in 1971-72 on account of the record production of coconuts followed by higher off-season market arrivals and lower demand from upcountry consumer markets due to the breakdown of

transport system by flood havocs in many parts of the country. Besides these, the credit control measures pursued by the Government had considerably checked the speculative hoarding. During 1972-73, these prices looked up as there was some decline in nut production in Kerala from their preceding level, besides the failure of *Kharif* oilseed crops, as South-West monsoon failed in the major oilseed producing areas in the country. There was general shortage of oils and fats by 22 per cent not only because of poor

Table IV. *Production of edible oils in India during 1960-61 to 1983-84 ('000 tonnes)*

Year	Coconut oil	G. nut oil	Sesamum oil	Mustard oil
1960-61	197	1062	100	417
1961-62	187	1108	115	431
1962-63	195	1075	153	417
1963-64	195	1135	136	275
1964-65	184	1385	150	458
1965-66	180	969	132	403
1966-67	171	1005	129	373
1967-68	173	1324	138	409
1968-69	170	1066	131	417
1969-70	186	1171	139	489
1970-71	190	1413	175	633
1971-72	187	1429	140	456
1972-73	181	918	120	590
1973-74	173	1345	150	545
1974-75	178	1157	119	715
1975-76	181	1513	140	543
1976-77	170	1180	120	440
1977-78	180	1360	146	451
1978-79	180	1431	162	524
1979-80	202	1290	140	530
1980-81	211	1136	138	419
1981-82	222	1666	163	638
1982-83	236	1216	172	675
1983-84	218	1676	192	785

harvest of oilseeds, but also due to the reduction in the imports of tallow and soyabean oil.

The concerned prices made quantum jump in the year 1973-74 over the 1972-73 levels as the production of coconuts had suffered substantially during that year by the delayed effect of poor monsoon in 1972 and 1973. Added to this there was practically no imports of copra and coconut oil into India in that year. The inflationary trend in domestic market accentuated by the global inflationary situation. The prices further moved up in 1974-75 as the production of other edible oils was low and their supplies were adversely affected by the pursuance of

Government policy of maximum prices for edible essential oils and coconut oil being excluded from this scheme got the demand push in the edible oil sector. The failure of groundnut crop in Tamil Nadu also had contributed to the hike in the prices of coconuts and their products in Kerala markets. The imports of edible oils were also restricted partly due to tight foreign exchange reserves and partly due to the ruling of higher prices of oilseeds and oils in the international markets on account of worldwide drought of 1972.

A sharp fall in the prices of coconuts and their products featured in 1975-76 despite the fact that the production of nuts in that year was

drastically reduced and the imports of copra and coconut oil into India were conspicuous by their absence. The fall in these prices was rather a part of decline in prices of agricultural commodities in general following an exceptionally good harvest of several crops, particularly *Kharif* oilseeds around the country. Further to this, the deflationary and corrective measures like stringent actions against hoarding and speculation on one hand and severe credit control pursued by the RBI as part of emergency regulations had their effect on the economy and consequent price behaviour.

During 1976-77, the prices again ruled in the reverse direction. The production of coconuts was low. Moreover, against the backdrop of poor oilseed crop prospect due to delayed monsoon the bullish sentiment was noticed by build up of inventories. In the following three years, the prices under this discussion shot forth by the inflationary spiral, while their supply positions improved both through the production and imports. It is worth mentioning here that the Government had liberalised the imports of edible oils under Open General Licence (OGL) from 1977 for arresting the rising trend of the oil prices and the total imports of edible oils into India during 1977-78 to 1979-80 were of the order of about 1 million tonnes per annum as against the average volume of imports of some 79,000 tonnes per annum during the immediate three preceding years. As far as coconut oil import is concerned, it was tripled to 16,500 tonnes in 1977-78 from 5,300 tonnes in 1976-77, but in the following year it was slashed

to 3000 tonnes due to strong protest from the Kerala coconut growers. The opposition to the import of copra and coconut oil by Kerala farmers had forced the Government of India to ban their imports from 1979-80. Even though the impact of the liberal import policy on all other edible oil prices could be realised by the declining trend from October 1979, the coconut oil prices still ruled high because of the above mentioned factor in addition to bad monsoon in Kerala and anticipated poor harvest of coconuts in 1979-80.

The average wholesale prices of coconuts, copra and coconut oil were further hardened in 1980-81 in spite of the record production of coconut oil owing to the increase in the export quota of Hand Picked and Selected (HPS) groundnut. Thus coconut oil price rose in sympathy with groundnut oil. This year was incidentally notable for record import of edible oils (1.7 million tonnes) into India, but the nationwide inflationary pressure surcharged with the global inflationary conditions as well as the overhang of excess liquidity failed to exhibit price control. During 1981-82, however, the prices under reference climbed down marginally due to lower upcountry market demand following higher production of other edible oilseed crops, besides delayed effect of large scale imports of edible oils in the preceding year and psychological effect in the trade circle on the arrival of small quantity of coconut oil in Cochin Port in the guise of coconut acid oil. Several anti-inflationary strategies adopted by the Government might have contributed to the reversing the rising trend in the

prices of coconuts and their products. These prices again took an upward turn in 1982-83 in spite of the improvement in coconut production in that year compared to the preceding year, because of the indirect effect of poor groundnut crop following widespread droughts and floods in many parts of the country.

The prices in 1983-84 swung uphill owing to the delayed effect of unprecedented drought of 1982 in Kerala. This is the first time in the 28 years history of Kerala that the coconut production had fallen to an all-time low level of 2695 million nuts from an average of about 3000 million nuts in the preceding four years. Coupled with the widening of the gap between the demand for and supply of the coconuts, copra and coconut oil caused by the drastic crop failure, the inflationary pressure mounted by the increase in the prices of some petroleum products, railway fares and freight rates, postal tariffs, and excise and custom duties of several other commodities had given an astounding push to the price levels. These prices further surged to record high in 1984-85 as there was no carry-over of stocks from the previous year and the pent-up demand quickly absorbed the small harvest of that year. The decision of the Government to ban the imports of tallow also accentuated the rising trend of these prices. What could have been the real impact of the unprecedented Kerala drought on these prices, had there been no massive scale distribution of palm oil through the fair price shops in this State which amounted to over 28,000 tonnes each year during 1982-83 and 1983-84 and

over 47,000 tonnes in 1984-85, is anybody's guess.

Crash in prices

After ruling at a higher plateau for a long 24 months the prices of coconuts, copra and coconut oil suddenly crashed to 1982-83 level from the beginning of 1985. It is extremely difficult to pinpoint the precise cause for this crash at this stage as the production and supply estimates for coconuts, other oilseeds and edible oils for the year 1984-85 are yet to come. The reason for such an outcome is attributed at certain quarters to a bumper production of coconuts in Kerala as well as the other parts of the country following most favourable monsoon besides the special efforts made by the Kerala Government to rehabilitate the drought affected coconut gardens. Extremely beneficial weather in the other parts of the country has also considerably improved the prospect of both *kharif* and *rabi* oilseed crops. According to the official estimates the edible oil production in India for the year 1985 will be of the order of 3.7 million tonnes as against 3.4 million tonnes during 1984. Simultaneously, the imports of edible oils to the tune of around 1.5 million tonnes a year are now being effected regularly. Under these circumstances, it is not unusual to notice the absence of speculative buying as well as the absence of good enquiries from the upcountry circles. It is therefore, reasonable to believe that the recent downhill movement of the prices of coconuts and their products is more of a levelling up and corrective nature to the astoundingly high level prices caused by severe supply volatility, than as a general fall in prices.

Import factor

There has been, however, a strong feeling in some quarters that the sudden slump in coconut sector is the hand work of massive imports of copra and coconut oil into the country in the recent past under the Replenishment (REP) Scheme. This contention has been denied by the Government of India through the official channel stating that the imports of coconut oil under REP were only small. According to the official version, as far as coconut oil import on authorised channel is concerned, a small quantity of 9044 tonnes was imported by the State Trading Corporation (STC) in April, 1984 as one time operation to relieve the pressure on the prices of indigenous oil and there was no import of this oil other than that 'one time affair' in the last three years. The import of copra was limited to 500 tonnes during 1982-83 and 1000 tonnes during 1983-84, while there was no import during 1984-85. Hence there is no valid point beyond mere psychological factor for corroborating the import issue of copra and coconut oil to the sharp fall in the prices of coconuts, copra and coconut oil during the current period, provided the official statistics on imports could be accepted at their face value. What is however disturbing is the real situation in the fields of imports and exports that one cannot assess under the present cloud of black economy in India. As long as the system of foreign trade management armed with the several lines of control, foreign exchange restrictions, heavy custom duties and high tax rates is allowed to continue and the international price of

the commodities in demand rule significantly lower than that in the domestic markets, the clandestine operations in the imports and exports cannot be easily ruled out. For this very reason only an element of doubt has been cropped-up at some quarters giving room to believe that this unprecedented slump in coconut sector is the result of massive imports of copra and coconut oil through both the legal and illegal channels.

Substitution factor

Till 1960's coconut oil was considered as an indispensable ingredient in the industrial sector such as soap manufacturing. It is to be realised that the technological breakthroughs in the field of oil technology have found relatively cheaper fats as substitutes for coconut oil in the non-edible sector. As a result, the demand for coconut oil from the organised units of the soap industry has been reduced considerably. In certain units, for example, where this oil alone constituted 20 to 25 per cent of total input, its share has fallen to less than 5 per cent, mainly because of cost disadvantages. Similarly in the case of edible sector, where the demand for coconut oil is estimated of the order of some 82,000 tonnes (38 per cent of the total production of coconut oil), it is now believed that around 20 per cent of substitution of this oil has taken place by comparatively cheap as well as easily available close substitute, *viz.*, palm oil through imports though no authentic empirical data is presently available about the degree of substitution. It could however be inferred from the fact that the public distribution of 47,300 tonnes of palm oil through the fair

price shops in Kerala during 1984-85 could have significantly affected the usual offtake of 60,000 tonnes of coconut oil in the State as edible oil and in turn resulted slump in coconut sector.

It is estimated that Kerala alone produces 98 per cent of the total production of 0.34 million tonnes milling copra in India. While about 52 per cent of the milling copra produced in this State is crushed locally, the remaining 48 per cent enter into the inter-State trade for crushing mostly in Bombay and Calcutta. Similarly, Kerala produces about 52 per cent of the total production of 0.21 million tonnes of coconut oil in India. Nearly 63.5 per cent of the State's oil production is retained for local consumption and another 34.5 per cent moves outside the State. In other words, about one-half of copra and one third of coconut oil produced in Kerala find their way to the outside markets. Under this situation, the impact of unprecedented crash in prices of these commodities on Kerala economy could be well realised.

Some of the individuals and organisations have come out with the suggestions for export of copra and coconut oil to bridge the demand gap. The feasibility of this proposal lacks economic support as the prices of copra and coconut oil in international markets are less than half of the Indian market prices. The overseas trade in this case would mean subsidising the export to a great extent and it will not be advanta-

geous in any way to the country's economy. Under the present situation, a remunerative price stabilisation programme should be the first step to remove uncertainty and to create incentive for higher productivity. The demand for support price for coconuts and its product is quite justifiable. Since administering the support price for coconuts may pose practical problem because of wide variation in the sizes of nuts, it would be desirable to extend support price for copra. The argument against support price for copra that this will not help the coconut grower, but help only intermediaries is not valid here as coconut price in Kerala is always determined by copra price. However, in order to overcome this crisis, it is not enough to cover coconuts and their products under support price or market intervention price alone, the alternate use of coconuts in forms of desiccated coconut and coconut cream; and the alternate use of shell in form of activated carbon which are considered to be Value Added Products and of higher export potential need to be pursued. Simultaneously, the efforts should be made to make the crop competitive by increasing the productivity per unit area through the adoption of modern technology of coconut farming system.

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