Trends in coconut oil production and trade in the world (1)

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Summary. — A review of the trends in coconut oil production and trade against the background of the trends in the world coconut area and production has been made for the period 1966 to 1980. The annual compound growth rates of area, production and yield rate for this period are estimated at 3.58 p. 100, 2.14 p. 100 and (—) 0.96 p. 100, respectively. Coconut palms occupied an area of about 8.26 million ha and produced nearly 35 million t of nuts, per year with an average productivity of 4.5 t per ha during 1976-80. The growth rates in respect of copra and coconut oil productions come near 2.4 p. 100 in both the cases, while the same for the exports of copra and coconut oil in terms of oil works out as 2.1 p. 100 ever a period of one and half decades ending 1980. During 1976-80 the average volumes of copra and coconut productions stood at 4.64 million t and 2.84 million t and their exports in oil equivalent averaged around 1.67 million t/year. The USA, West Germany, Netherlands, France and Japan are the major importers of coconut oil. While the failure on the part of the farmers as well as development agencies to replant superior materials in place of senile, diseased and unproductive palms is the main reason for the declining trend in coconut productivity ; rapid growths in the production of soya oil and palm oil and their availability at competitive prices are the main causes for the decline in the pre-eminent trade position of coconut oil in the world.

INTRODUCTION

For centuries coconut oil obtained from the dried kernel of *Cocos nucifera* L. fruit, has been one of the world's most important sources of vegetable fat. This oil lends itself to a number of applications. In producer countries it is widely used for culinary purposes and to some extent for toiletry preparations. However, about half of the coconut oil production in the world is presently utilized by the industrial sector for the manufacture of soap, detergents and dairy fat substitutes [1].

The main object of this paper is to review the trends in coconut oil production as well as its trade in the world against the background of the trends in the area and production of coconut, and copra. The relevant data pertaining to the period 1966 to 1980, received from the Statistics Division of the Food and Agriculture Organisation of the United Nations (FAO), have been analysed for the purpose of this study.

I. — COCONUT AREA

The pre-world war (1938) estimate of world coconut area was of the order of 3.2 million ha [2]. In the post-world war period the area under this crop has expanded considerably and for the quinquennium 1966 to 1970 this area stood at 5.78 million ha, and increased to 6.81 million ha during 1971-75 and 8.26 million ha during 1976-80.

According to the distribution of area as well as production, seven out of the eight leading coconut producers in the world belong to the Asian-Pacific region. The notable exception is Mexico which occupies the eighth place. The Philippines and Indonesia account for about one-third and one-fifth of the total world coconut area, respectively.

The coefficient of variation of the world coconut area comes to 15.36 p. 100 and its annual compound growth rate works out to 3.58 p. 100, for the period 1966 to 1980. The growth rates in area among the leading producers are found to be higher in respect of Mexico, the Philippines and Indonesia than the estimated growth for the world as a whole, but less than 5 p. 100. In the case of Sri Lanka, however, the growth rate is observed to be negative (Table I).

II. — COCONUT PRODUCTION

The FAO estimates of coconut production in tonnes are based on certain assumptions as almost all the coconut growing countries report their production figures in number of nuts. However, as in the case of area, the average production of nuts showed an increasing trend from 27.98 million t in the quinquennium ending 1970, to 30.60 million t in the quinquennium ending 1975, and further to 34.99 million t in the quinquennium ending 1980. The Coefficient of variation in world coconut production comes to 9.73 p. 100 for the period 1966-80.

Though the Philippines used to be the number one country in coconut production in the world as in the case of coconut hectarage, the average production of Indonesia during 1976-80 was surprisingly a little higher than that of the Philippines. However, the average figures for the period 1966-80 show that the Philippines coconut production is slightly higher than that of Indonesia. The annual compound growth rate of coconut production in respect of Indonesia works out to 4.87 p. 100, whereas the same for the Philippines comes to 2.96 p. 100 during 1966-80. This explains the change in the relative positions of these two countries during 1976-80. In the case of India, the third largest coconut producing country in the world, the growth rate is less than 0.5 p. 100, while the same is even negative in the case of Thailand, Sri Lanka and Mexico. As far as the world average production of coconuts is concerned the compound growth rate comes to 2.14 p. 100 for the period under reference (Table II).

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TABLE I. — **World coconut area (in million ha)**
(Superficie mondiale plantée en cocotiers - millions d'hectares)

	Area *(Superficie)*						
	1966-70	1971-75	1976-80	1966-80	Share *(Part)* p. 100	C.V. p. 100	CGR *(TCC)* p. 100
World *(Monde)*	**5.78**	**6.81**	**8.26**	**6.95**	**100.0**	**15.36**	**3.58****
of which *(dont)* :							
India	0.98	1.09	1.08	1.05	15.1	6.36	1.13**
Indonesia	1.13	1.42	1.69	1.42	20.4	17.17	4.12**
Malaysia	0.29	0.31	0.33	0.31	4.5	5.53	1.18**
Papua New Guinea	0.18	0.19	0.22	0.20	2.9	9.26	2.08**
Philippines	1.78	2.16	2.85	2.26	32.5	20.48	4.66**
Sri Lanka	0.47	0.47	0.45	0.46	6.6	1.43	(−) 0.26*
Thailand	0.28	0.31	0.39	0.33	4.7	15.82	3.37**
Mexico	0.09	0.13	0.15	0.13	1.8	19.34	4.57**

* Significant at 0.05 level *(Significatif à 0,05)* - ** Significant at 0.01 level *(Significatif à 0,01)*.
(1) *Taux de croissance composé.*

TABLE II. — **World production of coconut (in million t/annum)** (1)
(Production mondiale de noix de coco - millions de t/an)

	Production						
	1966-70	1971-75	1976-80	1966-80	Share *(Part)* p. 100	C.V. p. 100	CGR *(TC* p. 100
World *(Monde)*	**27.98**	**30.60**	**34.99**	**31.19**	**100.0**	**9.73**	**2.14***
of which *(dont)* :							
India	4.16	4.43	4.28	4.29	13.7	4.80	0.44
Indonesia	6.60	8.16	10.67	8.47	27.2	20.65	4.87*
Malaysia	1.02	0.97	1.25	1.08	3.5	12.81	1.84*
Papua New Guinea	0.71	0.73	0.77	0.73	2.4	5.25	0.96*
Philippines	7.48	8.46	10.44	8.82	28.2	16.18	2.96*
Sri Lanka	1.87	1.85	1.63	1.78	5.7	12.25	(−) 1.27
Thailand	0.87	0.69	0.75	0.77	2.5	18.87	(−) 1.42
Mexico	0.96	0.81	0.88	0.88	2.8	11.21	(−) 1.02

* Significant at 0.05 level *(Significatif à 0,05)* - ** Significant at 0.01 level *(Significatif à 0,01)*.
(1) Weight of the whole nuts, excluding only the fibrous outer husk *(Poids de la noix entière, moins la bourre seulement).*

TABLE III A. — **Productivity** (1) **of coconut in the world (in metric tonnes/ha)**
(Productivité en noix de coco à travers le monde - t/ha)

	Productivity *(Productivité)*					
	1966-70	1971-75	1976-80	1966-80	C.V. p. 100	CGR *(TC* p. 100
India	4.26	4.05	4.01	4.09	3.61	(−) 0.68*
Indonesia	5.81	5.76	6.30	5.96	5.35	0.73*
Malaysia	3.46	3.09	3.46	3.34	8.51	0.08
Papua New Guinea	3.91	3.74	3.49	3.71	5.87	(−) 1.05*
Philippines	4.20	3.92	3.67	3.93	10.92	(−) 1.72*
Sri Lanka	4.02	3.96	3.60	3.86	11.54	(−) 1.01
Thailand	3.17	2.19	1.94	2.43	31.24	(−) 4.64
Mexico	10.29	6.11	5.84	7.41	32.94	(−) 5.35*
World average *(Moyenne mondiale)*	4.84	4.51	4.47	4.61	6.09	(−) 0.96*

* Significant at 0.05 level *(Significatif à 0,05)* - ** Significant at 0.01 level *(Significatif à 0,01)*.
(1) Production of a given year was divided by the coconut area of that year *(La production d'une année donnée a été divi la superficie plantée en cocotiers la même année).*

III. — COCONUT PRODUCTIVITY

The average productivity of coconut per ha in the world shows a declining trend during the period 1966-80. It has fallen from 4.84 t in 1966-70 to 4.51 t in 1971-75 and further to 4.47 t in 1976-80. Between 1966 and 1970 the average yield in respect of Mexico was little more than double that of world average and highest (10.29 t/ha) among the eight leading coconut producers. During the period 1971-75, though Mexico could retain its first rank in this respect, its average yield level slid down to 6.11 t, and in the following five year period, it was further reduced to 5.84 t/ha. On the other hand, there has been a noticeable improvement in the case of Indonesia and a modest improvement in the case of Malaysia during 1976-80 over 1971-75 productivity level. In this context, Mexico's position has slipped to second, the first place being occupied by Indonesia (Table III).

As the productivity per ha has been worked out by dividing the total production by the total hectarage under the crop without taking the palm areas under the pre-bearing, early bearing, full bearing and senile groups separately into consideration, these yield estimates naturally lead to wrong conclusions in most circumstances. In the case of the Philippines, for instance, there has been relatively larger expansion of the coconut area as compared to other major coconut producing countries in recent years (Table IV). Most of these plantations are either at their pre-bearing or early-bearing stages. Thus, the determination of the productivity on the basis of total planted area gives an erroneous picture as seen in the case of the Philippines, where the average yield per ha is found to be only 3.67 t during 1976-80, in spite of the fact that the average productivity per ha in most of the full bearing coconut holdings in that country is of the highest order among the eight leading producers in the world.

The coefficient of variation of the yield of nuts in the world as a whole works out to 6.09 p. 100 for the period 1966-80. It is a matter of great concern that the compound growth rates of coconut productivity for the period under review are negative in respect of six major producers as well as in the world as a whole, and positive, but less than 1 p. 100 in respect of the remaining two leading producers, namely Indonesia and Malaysia. Several plausible reasons could be attributed to this state of affairs. In the case of the Philippines and Indonesia massive new planting and replanting programmes have contributed to the number of pre-bearing and early bearing palms, considerably affecting the productivity at this moment and this point has already been mentioned in an earlier context. In the case of India, Kerala wilt commonly known as root (wilt) disease of coconut, is one of the major factors causing decline in the yield. It may not be wrong to say that almost all the coconut growing countries in the world today suffer severely from some kind of disease and pest (including rodent) problems. Similarly, the use of unprecocious and poor quality planting materials in the coconut rehabilitation, replanting and rapid expansion programme, failure to remove senile and unproductive palms from the existing plantations due to socio-economic constraints and at the same time carrying out underplantings (which lead to overcrowling of the existing plantations) are largely responsible for low productivity. Moreover, indiscriminate practice of inter/mixed croppings in coconut gardens, without due consideration for compatibility and other basic agro-climatic factors, has adversely affected the yields of palms, particularly when the crops are deprived of plant nutrition and subjected to moisture stress [3].

An attempt was also made to study the productivity by using the lag approach relating the production of a given year with the surface area under coconut 8 years earlier, in order to take into account the normal gestation period for the crop. Since the surface area data for the 50's and early 60's in respect of some of the producing countries could not be available, in this case, the analysis was limited to the period 1976-80 only (Table III-B).

TABLE III B. — **Productivity (1) of coconut in the world (in metric tonnes/ha)**

(Productivité en noix de coco à travers le monde - t/ha)

	Productivity *(Productivité)*		
	1976-80	C.V. p. 100	CGR *(TCC)* p. 100
India	3.97	2.72	– 0.38
Indonesia	8.21	5.04	– 3.25*
Malaysia	3.79	4.59	2.46
Papua New Guinea	4.18	5.78	1.76
Philippines	5.28	15.87	– 8.89
Sri Lanka	3.51	9.69	– 0.10
Thailand	2.47	12.09	4.80
Mexico	7.37	17.01	– 7.85
World average *(Moyenne mondiale)*	5.51	5.31	– 3.62**

* Significant at 0.05 level *(Significatif à 0,05)*. - ** Significant at 0.01 level *(Significatif à 0,01)*.

(1) Production of a given year was divided by coconut area 8 years earlier as lag approach *(La productivité d'une année donnée a été divisée par la superficie plantée en cocotiers 8 ans plus tôt - méthode de décalage)*.

TABLE IV. — **Index number of area under coconut in selected countries**

(Indice de la superficie plantée en cocotiers dans des pays sélectionnés)

Base year *(année de base)* **: 1970**

Year *(Année)*	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
India	104	105	105	107	102	103	101	101	102	110
Indonesia	104	105	111	118	121	127	131	132	138	142
Malaysia	101	102	101	99	101	102	109	108	107	105
Philippines	112	116	116	120	124	137	148	157	163	170
Papua New Guinea	102	104	109	109	113	119	119	121	124	128
Sri Lanka	100	100	100	100	100	100	97	97	97	97
Mexico	110	114	115	121	124	134	134	136	132	125
Thailand	102	103	105	107	108	110	146	128	133	134
World Total *(mondial)*	105	107	109	115	120	125	131	142	137	140

TABLE V. — **World production of copra (in million t/annum)**
(Production mondiale de coprah - millions de t/an)

	Copra production *(Production de coprah)*						
	1966-70	1971-75	1976-80	1966-80	Share *(Part)* p. 100	C.V. p. 100	CGR *(TCC)* p. 100
World *(Monde)*	**3.51**	**4.08**	**4.64**	**4.08**	**100.0**	**13.46**	**2.36****
of which *(dont)* :							
India	0.33	0.35	0.36	0.35	8.7	5.54	1.40**
Indonesia	0.69	0.85	1.14	0.89	21.9	23.61	5.23**
Malaysia	0.18	0.19	0.20	0.19	4.7	7.27	0.98*
Papua New Guinea	0.12	0.13	0.14	0.13	3.3	7.56	1.29**
Philippines	1.32	1.75	2.16	1.74	42.8	24.34	3.86**
Sri Lanka	0.21	0.18	0.12	0.17	4.3	34.77	(−) 5.59*
Thailand	0.03	0.03	0.04	0.03	0.9	15.36	2.96
Mexico	0.17	0.14	0.15	0.15	3.9	12.89	(−) 1.25

* Significant at 0.05 level *(Significatif à 0,05)* - ** Significant at 0.01 level *(Significatif à 0,01)*.

TABLE VI. — **World production of coconut oil (in million t/annum)**
(Production mondiale d'huile de coco - millions de t/an)

	Coconut oil production *(Production d'huile de coco)*						
	1966-70	1971-75	1976-80	1966-80	Share *(Part)* p. 100	C.V. p. 100	CGR *(TCC)* p. 100
World *(Monde)*	**2.13**	**2.53**	**2.84**	**2.50**	**100.0**	**13.32**	**2.39****
of which *(dont)* :							
India	0.18	0.18	0.19	0.18	7.3	4.81	0.62*
Indonesia	0.29	0.44	0.58	0.44	17.7	28.61	6.79**
Malaysia	0.10	0.11	0.11	0.11	4.4	7.98	1.15*
Papua New Guinea	0.02	0.02	0.03	0.03	1.2	15.15	1.67
Philippines	0.42	0.67	1.10	0.73	29.4	39.20	9.39**
Sri Lanka	0.15	0.10	0.07	0.10	4.0	30.75	(−) 4.57*
Thailand	0.02	0.02	0.03	0.02	1.0	20.50	3.67
Mexico	0.10	0.08	0.09	0.09	3.7	12.32	(−) 1.35

* Significant at 0.05 level *(Significatif à 0,05)* - ** Significant at 0.01 level *(Significatif à 0,01)*.

TABLE VII. — **Exports of copra and coconut oil in oil equivalent (in million t/annum)**
(Exportations de coprah et d'huile de coco, en équivalent huile - millions de t/an)

	Exports *(Exportations)*						
	1966-70	1971-75	1976-80	1966-80	Share *(Part)* p. 100	C.V. p. 100	CGR *(TCC)* p. 100
World *(Monde)*	**1.30**	**1.45**	**1.67**	**1.47**	**100.0**	**20.25**	**2.11***
of which *(dont)* :							
Indonesia	0.12	0.04	0.02	0.06	4.4	77.00	(−) 18.86*
Malaysia	0.05	0.05	0.06	0.05	3.8	24.60	2.67
Papua New Guinea	0.07	0.08	0.08	0.08	5.5	6.95	1.15**
Philippines	0.69	0.89	1.13	0.91	61.6	26.54	3.75*
Sri Lanka	0.07	0.05	0.02	0.05	3.6	47.43	(−) 13.74**

* Significant at 0.05 level *(Significatif à 0,05)* - ** Significant at 0.01 level *(Significatif à 0,01)*.

According to this approach, the productivity per ha is observed to be higher (in respect of all the countries) compared to that found in the previous analysis for an obvious reason. The world average, for example, for the period 1976-80 in the case of the non-lag approach was 4.47 t while in the 8 year lag approach it was 5.51 t. Indonesia, Mexico and Thailand however, maintained their respective positions as Number 1, 2 and 8 in the matter of productivity by both the approaches. By the lag approach, relative positions of all the other 5 countries under review were changed — the Philippines came to third from fourth and India came down to fifth from third position.

IV. — COPRA PRODUCTION

The average annual production of copra in the world has gone up from 3.51 million t in 1966-70, to 4.09 million t in 1971-75, and to 4.64 million t in 1976-80 (Table V). In spite of the declining trend in its productivity, the rising trends in both coconut and copra productions are explained by the expansion of the coconut areas in the world as evident from Tables I to IV.

Although the production of copra is assumed to be directly associated with the production of coconuts in a given time and place, the share of each country's copra production is noticed to be different from its corresponding share in the world coconut production. India's share, for example, in the world coconut and copra production was of the order of 13.7 p. 100 and 8.7 p. 100, respectively during the period 1966-80. On the other hand, the Philippines accounted for 26.8 p. 100 and 42.8 p. 100 of the world coconut and copra production in the same period. This sort of situation is explainable by the fact that utilisation of coconut in various forms considerably vary from country to country. Thus, in the case of India a sizeable portion of coconuts finds its use in several forms other than copra and coconut oil, while in the Philippines a major part of the harvested nuts gets converted into copra and coconut oil. Similarly, since a huge proportion of coconuts produced in Thailand goes for direct consumption as coconut meat, its share in the world copra production comes to 0,9 p. 100, when it accounted for 2.5 p. 100 of the world coconut production. The other reason which could be attributed to this difference is that the copra content/t of nuts widely varies from cultivar to cultivar.

The coefficient of variation of world copra production for the period 1966 to 1980 comes to 13.46 p. 100 while the compound growth rate works out at 2.36 p. 100. As in the case of the growths in coconut production, the growths in copra production in respect of Sri Lanka and Mexico were observed to the negative due to obvious reasons. However, a little higher growth rate in copra production compared to growths in coconut production in some of the leading producers are welcome trends as they suggest that the tendency to convert increasing number of coconuts into copra is increasing (Tables II and V).

V. — COCONUT OIL PRODUCTION

A historical review of the world's fats and oils situation reveals that during the pre-world war I (1909-13) period the total annual production of these commodities was of the order of about 12 million t (exclusive of industrial oils and those of minor importance) of which the supply from vegetable oils sector was to the tune of nearly 5.44 million t. In that again the coconut oil production was 0.75 million t or 13.7 p. 100 of the total vegetable oils. During the pre-world war II (1934-38) period, the world production of fats and oils increased to 20 million t, nearly half of this being vegetable oils (10.4 million t). The world supply of coconut oil also rose to 1.63 million t [4]. In other words, within a gap of two decades between 1909-15 and 1934-38 the production of coconut oil, total vegetable oils, and total oils and fats in the world, by and large had doubled. Afterwards, they did not rise in equal proportion.

As regards the recent past, the average annual production of coconut oil stood at 2.14 million t in the quinquennium 1966-70 and at 2.53 million t in 1971-75. During the period 1976-80 the average supply of this oil rose to 2.84 million t while the average production of vegetable oils and total fats and oils were estimated at 35.5 million t and 52.5 million t, respectively. It could be inferred from this that the share of coconut oil in vegetable oil production has fallen to 8 p. 100 in 1976-80 from 15.6 p. 100 in 1934-38. For the entire period of 1966 to 1980, the average production of coconut oil comes to 2.5 million t per year with the coefficient of variation as 13.32 p. 100, and annual compound growth rate as 2.39 p. 100. Barring Sri Lanka and Mexico for which the growth rates are observed to be negative, in the other six leading coconut growing countries the same are found to be positive though significantly different from one another.

The highest annual compound growth rate (9.39 p. 100) in coconut oil production is noticed in the case of the Philippines followed by Indonesia (6.79 p. 100). The Philippine's growth rate in copra production is interestingly smaller than that of oil production suggesting that the aqueous processing for coconut oil has taken a significant proportion in that country in recent years (1). In the case of India the corresponding figure comes to as low as 0.62 p. 100, and it is evident from the fact that this country's coconut oil production per annum had marginally increased from 0.18 million t during 1966-70 to 0.19 million t during 1976-80 (Table VI).

VI. — EXPORTS OF COPRA AND COCONUT OIL

The annual world exports of copra and coconut oil in oil equivalent averaged around 1.30 million t in the period 1966-70 and slowly moved upward and averaged to 1.45 million t during the period 1971-75 and to 1.67 million t in the period 1976-80. When one considers 1966 to 1980 as one period, the average volume in oil equivalent comes to 1.48 million t per year with a coefficient of variation of 20.25 p. 100 and annual compound growth rate of 2.11 p. 100 (Table VII). However, the compound growth rates of exports for copra and coconut oil separately, work out to (−) 6.31 p. 100 and 8.55 p. 100, respectively. From this, it can be concluded that during the recent years, the world exports of copra have been considerably declining and the trade is substituted by more and more of coconut oil exports from some of the producers.

Out of the eight major producers India, Thailand and Mexico do not figure in the copra/coconut oil export

(1) *Ed. note.* — According to our information the wet process is not in very widespread use now.

TABLE VIII. — **Imports of copra and coconut oil in oil equivalent (in million t/annum)**
(Importations de coprah et d'huile de coco, en équivalent huile - millions de t/an)

	Imports *(Importations)*						
	1966-70	1971-75	1976-80	1966-80	Share *(Part)* p. 100	C.V. p. 100	CGR *(TCC)* p. 100
World *(Monde)*	**1.27**	**1.42**	**1.69**	**1.46**	**100.0**	**18.79**	**1.97**
of which *(dont)* :							
Australia *(Australie)*	0.02	0.01	0.01	0.02	1.4	12.88	(−) 1.60*
Belgium *(Belgique)*	0.03	0.02	0.03	0.03	2.1	24.87	(−) 0.52
Canada	0.02	0.02	0.02	0.02	1.6	16.10	1.39
W. Germany *(Allemagne de l'Ouest)*	0.16	0.23	0.25	0.22	15.1	33.78	2.41
France	0.06	0.06	0.08	0.07	5.0	22.04	2.20
Italy *(Italie)*	0.03	0.03	0.04	0.03	2.6	23.61	2.07
Japan *(Japon)*	0.07	0.08	0.08	0.08	5.7	12.75	0.97
Netherlands *(Pays-Bas)*	0.07	0.11	0.12	0.10	7.0	37.70	4.21
U.K. *(Royaume-Uni)*	0.07	0.06	0.07	0.06	4.7	14.04	(−) 0.67
U.S.A. *(Etats-Unis)*	0.39	0.40	0.48	0.42	29.1	16.01	1.32*
USSR *(URSS)*	0.02	0.02	0.06	0.03	2.7	57.51	11.74**

* Significant at 0.05 level *(Significatif à 0,05)* - ** Significant at 0.01 level *(Significatif à 0,01)*.

sector as they do not have exportable surpluses. India is, in fact, a net importer of copra and coconut oil. Among the producing-cum-exporting countries the exports in terms of oil have gone up significantly in the case of the Philippines and marginally in respect of Malaysia and Papua New Guinea, whereas the same have drastically been reduced in respect of Indonesia and Sri Lanka during the period under review (Table VII). In some of these years, Indonesia has gone for imports in order to meet the domestic consumption.

During the early period of 1935 to 1939 coconut oil had comprised one-fifth of the total fats and oils which accounted for the international trade [5]. Today it has been reduced to a very small proportion.

VII. — IMPORTS OF COPRA AND COCONUT OIL

The eight major importers of copra and/or coconut oil are the USA, West Germany, the Netherlands, France, Japan, the UK, USSR, and Italy in that order. During the period 1966 to 1980 the USA alone accounted for around 29 p. 100 of the total world imports in oil terms followed by West Germany (15 p. 100). The estimated compound growth rates per annum for the same period range between 1.32 and 4.21 p. 100 for the leading importers namely the USA, West Germany, France, Italy and the Netherlands and as high as 11.74 p. 100 in respect of USSR. On the other hand, the same have become negative for countries such as the UK, Australia and Belgium (Table VIII).

CONCLUSION

In the American, European and Japanese markets, coconut oil, like palm oil, palm kernel oil, and soya oil, serves as raw material for the manufacture of margarine and other food fats. Now with the large-scale production of soya oil and palm oil (which are excellent substitutes for coconut oil) and their availability at competitive prices, in the international markets, the demand for coconut oil has been reduced to a great extent [4]. However, because of its use in a wide variety of confectionary applications, the USA and the EEC accounted for about 40 p. 100 of world imports of this oil in the year 1980.

Coconut and its oil will continue to be important to local economies of the producing countries like India. Among the oil yielding crops commonly grown in India, coconut offers relatively greater oil-yielding potential per unit area than others [3]. Even on a global perspective coconut is making a come back as a commercially strategic crop in spite of rapid growth in the alternative oil crops such as soyabeans and oil-palm. The development of high yielding hybrids has considerably increased the yields and reliability of coconut palms and there is no denying the fact that this crop holds great promise both as food crop and powerful energy supplier in the tropics.

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