

Indian Coconut Journal

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Coconut Sector in India at the crossroads: a brief narrative

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Introduction

Coconut is considered as one of the most important crops for the Asia and Pacific region, providing food, nutrition and livelihood to millions of coconut farmers in the region. Despite the economic importance of the coconut palm, coconut production continued to show stagnancy in production, productivity and trade in the recent decade (Sairam and Jayasekhar, 2019). The coconut sector in the past has been dominated by copra and coconut oil, and the international coconut trade used to be driven by the demand for coconut oil. However, demand for coconut oil has witnessed a sharp decline during the last decades due to increased competition from other edible oils, such as palm oil and soybean. Therefore, the price of coconut oil is influenced by the supply and demand of competing edible oils. In India, the coconut sector has been inextricably linked to the coconut oil, the most dominant product

from the palm, from time immemorial. Such a strong dependency on a single product had indubitably made the sector vulnerable for supply and price shocks. It is also noteworthy that the issues of trade and market prices are increasingly playing a key role in sustaining the livelihood of those who are dependent on this sector. Hence, it is imperative to think beyond the periphery of production and productivity especially when a wide range of other issues plague the coconut sector (Harilal, 2010). The coconut sector in the country is internationally integrated and faces fierce competition from other major coconut producing countries especially in the post World Trade Agreement (WTA) and ASEAN treaty era. Despite the importance of coconut with respect to its economic, nutritive and health contributions, coconut farming in India has been lately considered as unremunerative. A robust and well strengthened value chain plays a key role in ensuring the sustainable livelihood of all the



Table 1. Percentage share of world exports of coconut products

Sl. No	Product	Countries (percentage share)			
1.	Coconut oil	Philippines(47)	Indonesia(25)	Malaysia(5)	India(2)
2.	Copra meal	Philippines(58)	Indonesia(36)	Others(6)	India(--)
3.	Desiccated coconut	Philippines(27)	Indonesia(26)	Sri Lanka(8)	India(4)
4.	Coconut milk/cream	Indonesia(32)	Sri Lanka(53)	Philippines(9)	India(0.30)
5.	Coconut shell charcoal	Indonesia(78)	Sri Lanka(2)	Philippines(10)	India(10)
6.	Coir and coir products	Sri Lanka (39)	Philippines(17)	Indonesia (12)	India (32)
7.	Activated Carbon	Philippines(29)	Sri Lanka(16)	Indonesia(8)	India (35)

Source: Computed from ICC (2019)

stakeholders' of the coconut sector. In this regard, it is crucial to assure the judicious distribution of revenue share along with the chain from producer to the consumer (Muralidharan et al., 2019).

Demand and supply scenario

The projected coconut demand for 2050 is predicted to be around 45000 million nuts. With the projected supply of around 36000 million nuts, there would be a demand-supply gap of 9000 million nuts by 2050. In order to meet the projected demand, the annual growth rate in production should be 3.20 per cent. As a matter of fact, coconut in future may experience a paradigm shift from the oilseed label, if promoted as food for nutrition, health care

and environmental services to support the farming community. Moreover, the recent surge in the export of coconut products and the rising demand for tender coconut in the country are noteworthy. In such a scenario, by 2050, the demand for coconut would be certainly more than the estimated figure. Therefore, it would be a challenge to meet the futuristic coconut demand, especially because of the scarce land, labour, water and energy resources at disposal. An appreciable growth in total factor productivity and appropriate capital substitution are the possible alternatives and to achieve these, strengthening the traditional coconut based farming system through the use of modern research tools would be the starting point.



Country	Coconut (Fresh)	Coconut (Dried)	Coconut (endocarp)	Oil (refined)	DC	Shell charcoal
UAE	55.5	1.4	9.9	50.2	18.2	1.8
ME (others)*	30.1		--	27.2	15.7	2.6
EU	6.8	4.7	--	--	8.6	38.9
Malaysia	--	43.7	--	--	--	--
Afghanistan	--	40.1	--	--	--	--
USA	--	2.1	36.3	2.4	10.0	1.5
Vietnam	--	--	17.2	5.2	5.3	--
Nepal	--	--	13.4	3.2	10.2	--
Canada	--	--	8.0	--	3.3	--
Singapore	--	--	4.9	--	--	--
Sri Lanka	--	--	--	--	--	43.5
Others	7.7	8.0	10.4	11.9	28.6	11.7
Total(Rs Lakh)	16059.2	11922.7	3202.5	14003.5	1176.7	3462.1

* Other Middle East countries
 --Nil/Meager to be accounted
 Sourced from Department of Commerce, Export Import Data Bank

Global competitiveness

It is imperative to have a look at the international trade scenario of coconut value added product exports. While comparing with other major global exporters, the share of India in coconut product exports is meagre (Table 1). Though it is an accepted fact that India holds a robust domestic market in the coconut sector, it is high time that India emerges

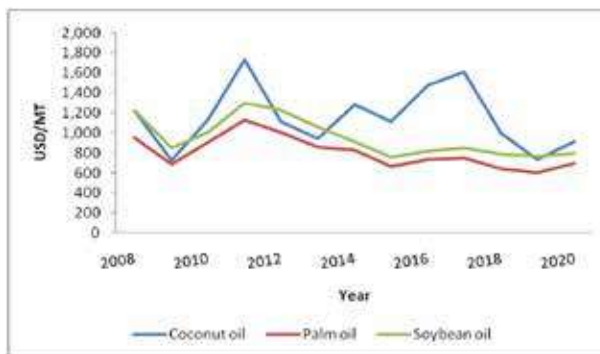


Fig 1. Price movements of major edible oils (2008-20)



as a major export player by upgrading its position in the global value chain of coconut exports. The Philippines and Indonesia together contribute the major world export share of coconut oil, copra meal and desiccated coconut. Sri Lanka too contributes substantially to the international exports of coconut milk, shell charcoal and coir products. However, in the case of exports of activated carbon, India is the leading exporter with a share of 35 per cent of the world exports. It is also noteworthy that, after the CDB was given the export promotion council status in the year 2009, the growth rate in exports of coconuts and coconut products from India had shown unprecedented surge due to the commendable efforts from the Board.

Price analysis and comparison vis a' vis major edible oils

In the world-edible oil sector, the major players are soybean, palm oil, sunflower oil and rapeseed oil, wherein with comparatively lower production, coconut oil sector had to directly compete with these edible oils in the international trade facet. On the other hand, in the quality front, coconut oil stands as a premium product due to its high lauric acid content. Nevertheless, the international coconut oil prices are very much linked to the supply-demand equations of the other major edible oils and therefore subject to instability and price fluctuations. Palm kernel oil is the close substitute, and thereby the close competitor of coconut oil due to the lauric acid contents in both these oils. However, in the industrial front, oleochemical industry prefers palm kernel oil, whereas food and confectionery industries are more inclined towards coconut oil.

Adulteration of coconut oil with cheaper oils such as palm oil due to large price differential is a serious issue that affects coconut farmers and also human health. It is crucial that appropriate steps need to be taken to check adulteration and stop manufacturing, sale and distribution of adulterated coconut oil to protect the interests of both consumers and producers.

The price movements of coconut oil, soybean oil and palm oil for the period 2008-20 are depicted in Fig 1. It is striking that, excluding a few years, mostly coconut oil prices were much higher than the other two edible oils, and this price wedge was especially ruled at highest levels during 2013-18. The higher international prices than the substitutable edible oils will certainly debilitate the competitiveness of the coconut oil in the international market, and this is a matter of grave concern as far as the sustainability of the coconut sector in long term perspective.

The average percentage price difference of coconut oil in comparison with palm oil and soybean oil for the different period is illustrated in Table 3. The price difference with palm oil stood at 44.60 per cent for the period 2008-20 and in the price difference in comparison with soybean oil was computed to be 23.39 per cent.

While examining the price instability over the last 15 years, it was observed that in the initial five years (2006-10), the price instability indices of coconut oil (0.035), palm oil (0.040) and soybean oil (0.031), have not shown much difference. Still, in the subsequent

Table 3. The average price difference (%) with coconut oil

Period	Palm oil %	Soybean oil %
2008-12	24.86	4.15
2012-16	21.12	2.01
2016-20	31.04	13.07
2008-20	44.60	23.39

Source: Author's calculation

period, coconut oil prices at the international level were comparatively volatile than the other two major edible oils. It is also noteworthy that the prices almost tend to yield stability in the cases of palm oil and soybean oil. In contrast, coconut oil has shown a tendency to increasing price instability.

Policy level impediments

For the past two decades, plantation sector in India has been confronting a commodity crisis, arguably, an off shoot of the ongoing trade liberalization. The regional trade agreements such as ASEAN-India Free Trade Agreement (AIFTA) has made the crisis even worse due to the adverse policy frame in the form of phased tariff reduction and fixation of import tariffs at extremely low-level. In this context, it would be erroneous to view coconut sector in isolation, because the trade and tariff decisions on competing crops as well as edible oils in general would straight away affect the coconut sector as well. In the tariff reduction schedule of the special products according to the AIFTA, the reduction commitment of palm oil (an immediate substitute of coconut oil) is notable. Unprecedented growth rate in palm oil imports in recent times is also a matter of concern in view of the domestic prices of the coconuts. The possibility of lowering the existing tariff structure of special products in the forthcoming review meetings of AIFTA is also bother some.

With the ongoing liberalization process across the world, proliferation of Regional Free Trade Agreements (RTAs) has become inevitable. There will be differential impact of such trade agreements on different sectors, and it is important to safeguard the plantation sector in general and coconut in particular in the forthcoming RTAs. In view of this, it is imperative to conduct studies on challenges faced by the coconut sector at micro and macro levels to bring out plausible strategic action plans for the sectoral reorientation. It is also crucial to envisage appropriate policy options with regard to the trade

and tariff structures of coconut sector and to ensure such sectoral details are appropriately represented in the national and international dialogues.

It is always better to have a floating import duty structure on edible oils, so that the tariffs can be adjusted in relation to the international prices of edible oils to stabilize the domestic price fluctuations. But in the case of palm oil in India, the import duty was always hovering around five per cent, irrespective of the international price movements. The flawed tariff fixation of such pattern had detrimentally affected the domestic price scenario (and movements) of the coconut oil in the country. Therefore, it is vital to regulate the edible oil tariff structure, so that the state machinery can adopt flexible policy options to control the price fluctuations of coconut oil.

Assessment of integration of MSP of copra with the price of coconut received by the farmers

The coconut market in India is always unstable and uncertain due to frequent fluctuations in prices. Usually fluctuation in price occurs due to change in market conditions aroused in response to seasonal and annual variation in production apart from competition from other edible oil particularly palm oil. Coconut prices in India have been historically integrated with the coconut oil prices. Therefore, indubitably the coconut prices received by the farmers are integrated with the MSP of copra. In general the farmer prefers to sell fresh coconut when the price of coconut is attractive, as he receives a remunerative sum in his hand immediately and he can get rid of processing and transportation charges. Contrary to this if the copra and oil prices are lucrative; farmer prefers to do at least primary level processing which would augment farm level copra production. Therefore, the MSP for copra fixed at higher levels would certainly influence and act as an incentive for the primary value addition in coconut. It should be in such a way that the MSP ensures an incentive for processing to the coconut farmers when compared with that of selling fresh coconut. Other pertinent factors in this context of discussion are lack of effectiveness and efficiency in copra procurement by the agencies and inadequate infrastructural facilities for the storage of copra.

Conclusion

The potential area of the coconut sector is the agri-business, based on value added products of coconuts. The breakthrough products developed

Retirement



Shri. K K Johnson retired from the services of Coconut Development Board on 31st March 2021 on super annuation. He has served the Board for around 33 years.

from coconuts have the export potential and thereby in the long run, the price stabilization in the domestic coconut sector is also possible. In view of the proliferating regional trade agreements, hereafter the modalities of such a commodity specific trade agreement should be worked out with utmost care wherein we should end up in a win-win situation. In this respect we need to thoroughly analyze the existing tariff structure of each ICC countries, and an unbiased tariff reduction schedule should be proposed. It is also important to consider the existing tariff structures of close substitutes/competing products of each countries and there by arriving at a consensus.

References

- Harilal, K.N. 2010. *ASEAN-India free trade area- Noises of dissent from Deep South. Occasional Paper No. 2010:01 State Planning Board, Government of Kerala.*
- ICC. (2019). *Coconut Statistical Year Book-2017, International Coconut Community, Jakarta, Indonesia, 351p.*
- Muralidharan, K., Subramanian, P., Mathew, A. C., Thamban, C., Jayasekhar, S., Krishnakumar, V., & Madhavan, K. (2019). *Upgrading a Coconut Value Chain: Empirical Evidence from North Kerala. International Journal of Innovative Horticulture, 8(1), 72-80.*
- Sairam, C. V., & Jayasekhar, S. (2018). *World Coconut Economy: Sectoral Issues, Markets and Trade. In The Coconut Palm (Cocos nucifera L.)-Research and Development Perspectives (pp. 801-820). Springer, Singapore.*