The Cocommunity

Monthly Newsletter of the International Coconut Community

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International Coconut Community

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EXECUTIVE DIRECTOR SPEAKS ...

"More Intensive Collaborative Efforts for 2022"

Welcoming 2022 with positive enthusiasm and new opportunities to carry out programs as part of the vision and missions of the International Coconut Community despite the big challenges of unprecedented COVID-19 and various new variants. The outlook of coconut product demand in global markets grow at a compound annual growth rate of about 13% from 2020 to 2026. The forecast of rising market demand of coconut-based products draws our attention to meeting market opportunities through collective action of science, knowledge, skills, experience and political will since we all aware of challenges across value chains.

Downstream problems including low productivity due to pests and diseases, senile palms, and low maintenance of coconut plantations that cause insufficient raw materials for the processing industry require comprehensive efforts from coconut stakeholders. Coconut production can be increased by increasing the rate of replanting of senile trees, new planting with good quality and elite planting materials, managing pests and diseases, and implementing smart or precision agriculture.

At the upstream level, raising quality standards to comply with established standards is critical to improving product quality, meeting customer expectations, avoiding food adulteration, protecting consumer health, increasing global acceptance, increasing export revenues, and making important contributions to long-term revenues and profitability. When people produce good quality and safe products, it means they protect humans from toxic foods that can bring the economy closer to optimal well-being. The increasing demand for coconut products is due to the healthy, socially impactful, and environmentally friendly aspects of coconut. Therefore, policy support to ensure coconuts as a high priority program in the national development plan can promote the success of increasing coconut production, thus ensuring sufficient raw materials and support for the coconut industry and improving farmers' livelihoods. Coconut polyculture cultivation systems with specific intercrops have the potential to increase farmers' incomes and create good quality ecosystems. Collaborative efforts to integrate resources must be intensified by 2022 to achieve sustainable development goals and deliver tangible benefits to coconut farmers, consumers, countries, and global communities.

DR. JELFINA C. ALOUW
Executive Director

PREVAILING MARKET PRICES OF SELECTED COCONUT PRODUCTS AND OILS

Price of Coconut Crude Oil (CNO) decreased in Philippines, Indonesia and Sri Lanka. Price of Desiccated Coconut (DC) decreased in Philippines and Sri Lanka, but increased Indonesia.

COPRA: The price of copra in Indonesia was US$948/MT in December 2021, which was higher than previous month's price. Compared to the same month of last year the price was US$ 94/MT higher.

In the domestic market of the Philippines (Manila), the price decreased by US$ 63/MT from US$1,004/MT to US$94/MT. The price was US$21/MT higher compared to the price of US$920/MT in December 2020.

In Sri Lanka, price of copra was slightly increased from US$1,561/MT in November 2021 to US$1,564/MT in December 2021.

COCONUT OIL: The average price of coconut oil in Europe (C.I.F. Rotterdam) for December 2021 decreased to US$1,782/MT in December 2021.However, this price was higher by 22% as opposed to the price in December 2020 at US$1,459/MT.

The average local price of coconut oil in the Philippines in December 2021 was no quoted.

The FOB price of coconut oil in Indonesia in December 2021 scaled down by US$8/MT compared to the previous month from US$1,595/MT to US$1,587/MT. December 2021 price was US$194/MT higher than last year's which was US$1,393/MT.

COPRA MEAL: The average domestic price of the commodity in the Philippines was quoted at US$202/MT. The price was US$26/MT higher compared to the previous month price and was US$79/MT lower than the last year price for the same month.

The average domestic price of copra meal in Indonesia was US$309/MT which was higher than previous month price. The price was US$28/MT higher than last year's price in the same month.

DESICCATED COCONUT: The average price of desiccated coconut (DC) FOB USA in December 2021 was US$2,546/MT, which was lower than previous month price and US$77/MT higher than the price of the same month last year.

In Sri Lanka, the domestic price of desiccated coconut in December 2021 was US$2,510/MT or US$158/MT lower than in November 2021. Meanwhile, the price of DC in the Philippines domestic market in December 2021 was US$2,039/MT. The price was the same as price in November 2021, but higher than the price in November 2020. Indonesian price of DC in December 2021 was US$2,450/MT. The price was lower compared to last year's price of US$2,488/MT.

COCONUT SHELL CHARCOAL: In Philippines, the average price of the commodity in December 2021 was US$430/MT which was lower than previous month's price. Meanwhile, Indonesia's charcoal price slightly increased from US$590/MT in November 2021 to US$592/MT in December 2021. Moreover, compared to last year's price, the price was higher by US$3/MT. Sri Lankan's price in December 2021 was US$531/MT which was lower than last month's price.

COIR FIBRE: Coir fiber was traded in the domestic market in Sri Lanka at US$108/MT for mix fiber and US$546/MT-US$869/MT for bristle. The Indonesian price for mixed raw fiber was US$220/MT in December 2021 which was the same as price in November 2021.

Price of Coconut Products and Selected Oils (US$/MT)

Products/Country	2021 Dec	2021 Nov	2020 Dec	2021 (Annual Ave.)
Dehusked Coconut				
Philippines (Domestic)	213	213	190	219
Indonesia (Domestic, Industry Use)	223	243	234	215
Sri Lanka (Domestic, Industry Use)	283	303	n.q.	282
India (Domestic Kerala)	533	518	740	582
Copra				
Philippines (Dom. Manila)	941	1,004	920	922
Indonesia (Dom. Java)	948	905	854	890
Sri Lanka (Dom. Colombo)	1,564	1,561	1,501	1,615
India (Dom. Kochi)	1,335	1,377	1,815	1,581
Coconut Oil				
Philippines/Indonesia (CIF Rott.)	1,782	1,939	1,459	1,619
Philippines (Domestic)	n.q.	n.q.	1,413	1,425
Indonesia (Domestic)	1,587	1,595	1,393	1,461
Sri Lanka (Domestic)	2,985	3,035	2,635	3,012
India (Domestic, Kerala)	2,228	2,303	2,799	2,534
Desiccated Coconut				
Philippines FOB (US), Seller	2,546	2,548	2,469	2,521
Philippines (Domestic)	2,039	2,039	2,040	2,039
Sri Lanka (Domestic)				
Indonesia (FOB)	2,510	2,668	3,093	2,718
India (Domestic)	2,450	2,375	2,488	2,350
Copra Meal Exp. Pel.	n.q.	2,122	2,543	2,214
Philippines (Domestic)				
Sri Lanka (Domestic)	202	228	281	223
Indonesia (Domestic)	297	297	270	310
Coconut Shell Charcoal	309	307	281	289
Philippines (Domestic), Buyer				
Sri Lanka (Domestic)	430	441	447	479
Indonesia (Domestic Java), Buyer	531	544	470	535
India (Domestic)	592	590	589	588
Coir Fibre	531	536	543	561
Sri Lanka (Mattress/Short Fibre)				
Sri Lanka (Bristle 1 tie)	108	112	107	126
Sri Lanka (Bristle 2 tie)	546	572	521	584
Indonesia (Mixed Raw Fibre)	869	846	908	856
Other Oil	220	220	313	284
Palm Kernel Oil Mal/Indo (CIF Rott.)				
Palm Oil Crude, Mal/Indo (CIF Rott.)	1,861	2,069	1,193	1,533
Soybean Oil (Europe FOB Ex Mill)	1,270	1,348	979	1,133
	1,411	1,440	1,023	1,336

Exchange Rate

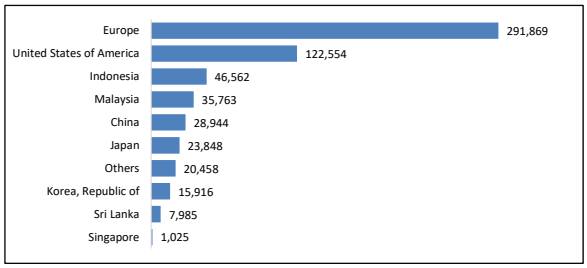
Dec 31, '21 1 US$ = P51.07 or Rp14,235 or India Rs74.50 or SL Rs202.92

1 Euro = US$1.14 n.q. = *no quote*

MARKET REVIEW OF COCONUT OIL

Global trade of coconut oil during the year 2021 faced some challenges especially delays and higher costs of shipments. Philippine Statistics Authority reported that during the period of January-October 2021, coconut oil exports from Philippines dwindled to 594,924 metric tons from 721,570 metric tons in January-October 2020. Demand from European countries and USA, the traditional market for coconut oil from Philippines, lessened during the period. Export of the oil to European countries declined from 359,658 in 2020 tons to 291,869 tons in 2021. At the same time, export to US market dropped from 133,864 tons to 122,554 tons. Philippines most likely will experience a downswing in export volume of the oil in 2021.

Figure 1. Export Destinations of Philippines' Coconut Oil, January-October 2021

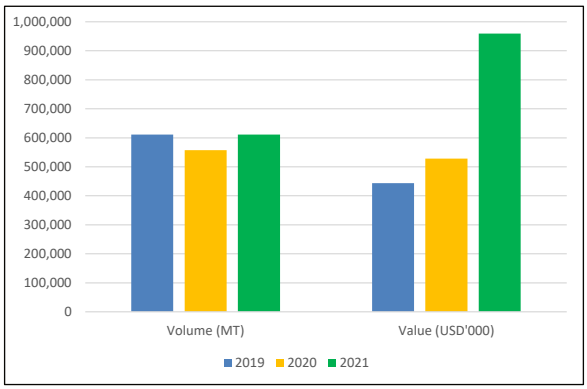


Source: UCAP

Meanwhile, export coconut oil from Indonesia is recorded a higher volume during 2021 taking advantage of lower export from the Philippines. During the period January-December 2021, Indonesia shipped 611,448 MT coconut oil to global market. The export was 9.8% higher as opposed to the previous year's volume. Major markets for Indonesian coconut oil were United States, Malaysia, China, and Netherlands. Export volume to these four countries constituted for more than 70% of the total export.

As the global economic is recovering, demand of lauric oils started to improve during 2021. During January-November 2021, US import of coconut oil was recorded a significant upsurge to level of 771,459 MT meaning an increase of 62.4% compared to the volume a year earlier. At the

Figure 2. Export of coconut oil from Indonesia, January-December 2019-2021



Source: BPS-Statistics Indonesia

November 2020 to 457,126 MT for the same period in 2021. Hence, total imports of lauric oils by US market rocketed to 1.23 million tons which was 60.5% higher than the previous year's volume.

Table 1. US Imports of Lauric Oils, January-November 2020/2021

		Jan-Nov 2020	Jan-Nov 2021	Change (%)
CNO	Volume (MT)	475,000	771,459	62.4
	Value (USD'000)	403,921	434,788	7.6
PKO	Volume (MT)	290,348	457,126	57.4
	Value (USD'000)	345,805	356,053	3.0

Source: The U.S. Census Bureau, Economic Indicators Division

Table 2. European Union (EU28) Imports of Lauric Oils, January – August 2020/2021

		Jan-Aug 2020	Jan-Aug 2021	Change (%)
CNO	Volume (MT)	472,753	466,905	-1.2
	Value (USD'000)	602,068	953,805	58.4
PKO	Volume (MT)	305,891	332,777	8.8
	Value (USD'000)	494,311	736,974	49.1

Source: ITC

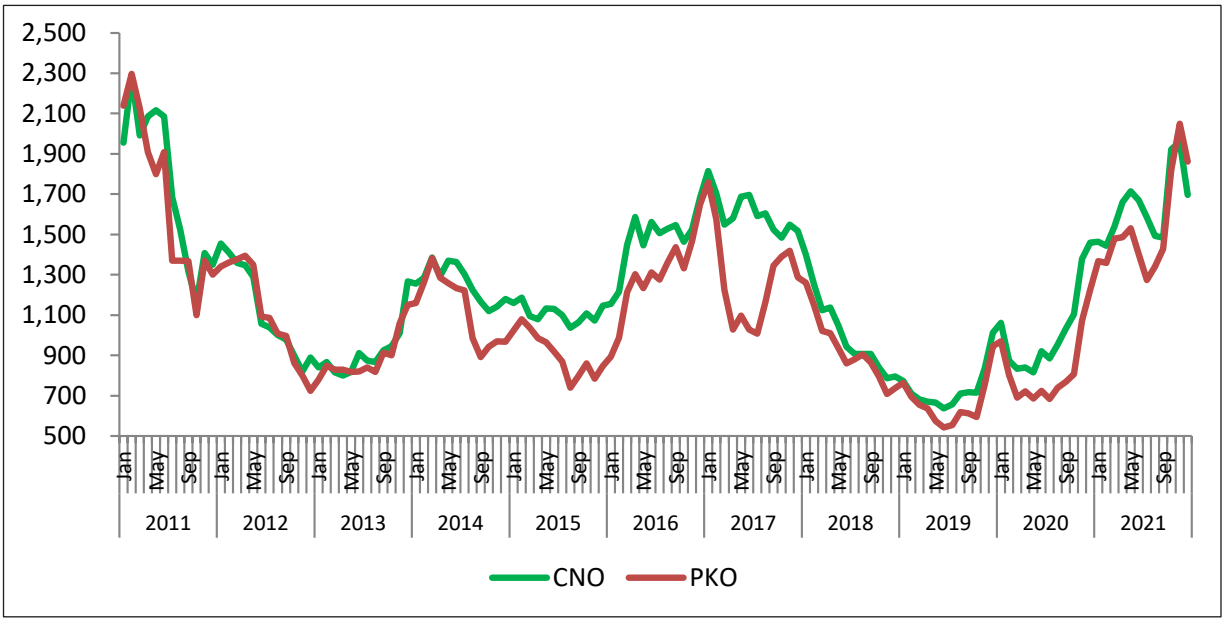
An increase of shipments of the oils was also observed in European market. During period of January-August 2021, imports of lauric oils by European countries was 799,682 which was 2.7% higher than the volume a year earlier. Import of palm kernel oil contributed to the higher import of the oils. Import volume of the oil rose by 8.8% during the period. Meanwhile, coconut oil import by European countries weakened by 1.2% during the period of January-August 2021. Moreover, demand of lauric oil is expected to continue recovering in 2022 following global economic recovery and higher production of the oils.

Global production of coconut oil is expected to improve in 2022 following foreseeable preferable weather condition and controllable COVID pandemic especially in South East Asia. Production of coconut oil during October 2021-September 2022 is forecasted to reach 2.95 million tons or level up by 11.3%. At the same time palm kernel oil production is estimated to go up by 4.5% to reach 8.28 million tons. Therefore, overall production of lauric oils in 2022 is expected to reach 11.23 million tons meaning an increase by 6.2% as opposed to the previous year's production.

As supply of the coconut oil is expected to improve, global trade of coconut oil is expected to continue recovering in the coming year. Oil World forecasted that export of coconut oil from Philippines in 2022 will reach 1.05 million tons. This means an increase of 22% as opposed to the export volume a year earlier. The increase is also attributed the expected economic recovery, especially in China, US and Europe. Likewise, Indonesia is most likely to experience higher export of coconut oil in 2022. Export of coconut oil from Indonesia is estimated to reach 640 thousand tons during the year.

Prices of lauric oils are expected to ease following foreseeable higher production during first quarter of 2022 assuming normal weather conditions and controllable COVID pandemic in producing countries such Indonesia, Malaysia, and Philippines. Price of the lauric oils have showed a downward trend since the last month of 2021. Price of coconut oil reached its highest level of US$1,961/MT in November 2021, but then dropped to US$1,696/MT in December 2021. Similarly, price of palm kernel oil reached its peak in November 2021 at US$2,050/MT and went down in December 2021 to US$1,861/MT. It is worth noting that price premium of coconut oil over palm kernel oil ended in November 2022. This the first time since March 2014 that price of coconut oil is lower than palm kernel oil. This is expected to bring about a shift in demand from palm kernel oil to coconut oil.

Figure 3. Price of Lauric Oils, January 2011 – December 2021, (USD/MT)



Source: ICC

COMMUNITY NEWS

PRODUCTION, PROCESSING AND MARKETING OF COCONUT MILK, CREAM AND YOGURT WEBINAR

The International Coconut Community (ICC) in collaboration with International Trade Centre (ITC) organized the 4th webinar on "Production, Processing and Marketing of Coconut Milk, Cream and Yogurt" on 30 November 2021. The training is part of the MoU executed between ICC and the ITC with the purpose to establish a framework of engagement and cooperation between ITC and the ICC to develop mechanisms for transferring technology relating to value-added coconut products, under the project "Alliances for the Coconut Industry Development Expansion and Enhanced Support for the Caribbean". There were 280 registered participants from 31 countries. The other partner collaborator of this series is CARIFORUM, financed by the European Union, and implemented by ITC, CARDI, and important Alliances partners, ACP, and Coconut Industry Board.

Dr. Jelfina C. Alouw, ICC, Executive Director, delivered the opening remarks. In her remarks she underlined the significance of the topic considering the increasingly growing global market, as well as delicious products, coconut milk, cream, and yogurt also have all essential amino acids and provide health benefits beyond basic nutrition. Coconut milk can be prepared into products with different fat levels to meet the needs of consumers for non-dairy milk. The proteins, hormones, minerals and vitamins contained in coconut milk, cream and yogurt open up new opportunities for research and application as studies have shown an anti-aging activity, probiotic activity and growth promoters for plants and animals.

Dr. Titiek Farienti Djaafar, Researcher, Assessment Institute for Agriculture Technology, Indonesia presented on coconut yogurt wherein she explained the coconut producing countries in the world, traditional and commercial coconut milk and coconut cream extractions process, the role of lactic acid bacteria (LAB) in milk fermentation, the role of LAB and probiotic bacteria for health, how to make yogurt from milk and coconut milk.

Dr. Chandi Yalegama, Head Coconut Processing Research Division, Coconut Research Institute, Sri Lanka, presented the processing of coconut milk and cream. She described the composition of coconut kernel, coconut milk and coconut refuse, the use of coconut milk, coconut milk preparation at domestic level and for processing purposes, quality control aspect of coconut milk production, the problem associated with coconut milk production, Sri Lankan standards for coconut milk, material and method of coconut milk processing, treatments for stability, pasteurization process, various packaging materials, observation on milk production, pH, Brix value, the fatty acid content of coconut milk preservations, stability of emulsion with various stabilizers, the effect of pasteurization time and temperature, shelf life, and machinery needed for small-scale coconut milk processing unit.

Mr. Tomas B. Medina, President and CEO of Brand Export, the Philippines, focused on the marketing and branding aspects of coconut milk and coconut cream, in which he explained the comparison of some coconut milk and coconut cream brands in the Caribbean and Jamaican, production and productivity of factories in the Philippines, Thailand, Indonesia, and Sri Lanka; integrated processing plant facilities, coconut food processing, coconut milk specification canned, coconut milk packaging; products packaging comparison from several top producers, brands, and market leaders; certification needed by the market, global coconut milk products market, pricing strategies, coconut milk and cream market outlook, opportunities and challenges.

There was an in-depth discussion on the topics, and the speakers addressed the queries. This webinar was moderated by Ms. Shanita John, ITC, Dominica. *(ICC News)*

WEBINAR ON COCONUT WATER, PRODUCTION, PROCESSING AND SUSTAINABLE COCONUT WATER VALUE CHAIN

International Coconut Community (ICC) in collaboration with International Trade Centre (ITC) organized a webinar on "Coconut Water, Production, Processing and Sustainable Coconut Water Value Chain" on 10 December 2021. The webinar is part of the MoU executed between ICC and the ITC with the purpose to establish a framework of engagement and cooperation between ITC and the ICC to develop mechanisms for transferring technology relating to value-added coconut products under the project "Alliances for the Coconut Industry Development Expansion and Enhanced Support for the Caribbean". There were 91 participants who attended the webinar. This is the 5th and last of the series of training and webinar lined up. The other partner collaborator of this series is CARIFORUM, financed by the European Union, and implemented by ITC, CARDI, and important Alliances partners, ACP, and Coconut Industry Board.

The webinar started with the introductory remarks by Mr. Tristan Alvarez, Project Coordinator, CARDI and the moderator of the webinar. Dr. Prima Luna, Researcher, Centre for Agricultural Post Harvest Research and Development (ICAPRD), Indonesia, presented an overview of coconut water processing, production, and sustainable value chain, wherein she described the industrial innovation tree, characteristic of coconut water, recent advances in various thermal, non-thermal processing and preservation methods, coconut water production method at SME, such as Ozonation method, Indonesian national standard for processed coconut water, and downstream process.

Mr. Krit Lajaroj, Managing Director, Tsus Febix Foodtech Co., Ltd., Thailand, presented the coconut water production and processing, which covered the topics of general production methods and different processing techniques in detail. Besides, market forecast; pulsed electric field, UV Pasteurization, and shelf-life comparison of coconut water.

Dr. C. Anandharamakrishnan, Director, National Institute of Food Technology Entrepreneurship and Management (NIFTEM), India, explained the significance of coconut in human health, sustainable value chain of coconut water, processing by conventional and alternative non-thermal technologies (Ozonation, irradiation, carbonation, hurdle technologies) and preservation, marketing potential, regulation, and consumer trends.

Ms. Mridula Kottekate, Assistant Director, ICC, delivered the closing remarks. She mentioned that this is the last webinar of the series organized in association with International Trade Centre. On behalf of ICC, she thanked the international partners: ITC, European Union, CARIFORUM, CARDI, the Coconut Industry Board of Jamaica, and other alliances for supporting this webinar. She added although coconut water is the purest natural drink available on the planet, but one of the perishable products too. When we are planning to go into this business, we have to be very careful about its shelf life. There are technologies available to retain its natural taste even after processing, which needs to be adopted. She hoped that this webinar would be helpful and beneficial for the participants to think about the process and going for a processing unit in the Caribbean, even on a small scale.

There was an in-depth discussion on the topics, and the speakers addressed the queries. *(ICC News)*

TECHNICAL PANEL DISCUSSION TO REINFORCE LEARNING

International Coconut Community (ICC) in collaboration with International Trade Centre (ITC) have organized webinar on "Production, Processing and Marketing of Coconut Milk, Cream and Yogurt" on 30 November 2021 and "Coconut Water, Production, Processing and Sustainable Coconut Water Value Chain" on 10 December 2021. Panel discussion on both the topics to clarify and reinforce learning was conducted on 14th December. 60 participants

from the ITC alliances countries attended the event. This panel discussion was the last of the series of collaborative events of ICC & ITC.

The discussion started with the introductory remarks by Mr. William Rodriquez, ITC, as the moderator. The resource speakers who participated and presented in the webinar conducted on 30 November and 10 December 2021 were: Dr. Titiek Farienti Djaafar, Researcher, Assessment Institute for Agriculture Technology, Indonesia; Dr. Chandi Yalegama, Head Coconut Processing Research Division, Coconut Research Institute, Sri Lanka; Mr. Tomas B. Medina, President and CEO of Brand Export, the Philippines; Dr. Prima Luna, Researcher, Centre for Agricultural Post Harvest Research and Development (ICAPRD), Indonesia: Mr. Krit Lajaroj, Managing Director, Tsus Febix Foodtech Co., Ltd., Thailand; and Dr. C. Anandharamakrishnan, Director, National Institute of Food Technology Entrepreneurship and Management (NIFTEM), India.

In the panel discussion, the resource speakers addressed the questions raised by the participants based on the two previous webinars. The major questions and topics discussed included the equipment and tools to make the products; yogurt, ice cream, coconut water processing, and the cost, the effect of alcohol on the stability of coconut milk, products can be made from fermented coconut milk, the best way to add alcohol to have a long shelf life in punches, pure coconut milk extracts suppliers, the process in producing coconut creamer for coffee, and the best coconut milk stabilizers and the shelf life of coconut water.

In her closing remarks, Dr. Jelfina C. Alouw, Executive Director, ICC, thanked all the resource speakers for their participation and sharing the knowledge and expertise with the participants. She hoped that participants have received the necessary information to identify potency and come up with the ideas to establish new coconut processing units or adapting and expanding the existing one to meet the growing demand to sustain the industry in their countries. She also emphasized on how to establish one integrated industry in one big region/ district or province to optimally use the raw materials and increase the income. Participants should also go for a high value-innovative product and target the niche market for optimal income. Securing consistent supply of raw materials to the coconut industry is crucial. It is better to provide higher quality products and services instead of competing for the lowest price. The producers need to understand the marketing platforms required by buyers and the standard requirements. To attract global consumers, it's important to include story on their brand, such as involvement of more smallholder's women and environmental concerns, so that the consumers would buy the products even at high prices. *(ICC News)*

INCLUSIVE COCONUT – AGRIBUSINESS MODEL

A webinar on "Inclusive Coconut-Agribusiness Model" was conducted by the International Coconut Community (ICC) on 16th December 2021. The webinar was attended by more than 100 people virtually, from 19 countries.

The objectives of conducting this webinar are to share the rural coconut sugar-based business model, the integrated coconut agribusiness model and to discuss the challenges and potential of the coconut industry to support an inclusive, resilient, and sustainable partner development and the lives of millions of smallholder farmers, as well as to those in play involved in the production, processing and marketing of coconut products.

Dr. Jelfina C. Alouw, Executive Director delivered the welcome address, wherein she mentioned that the webinar was organized in responding to the ICC member countries' request and the need to provide better insight and knowledge about the coconut industry from the various perspectives as well as to gain valuable information and the potency, challenges, and competitive advantage of

investing in the coconut-based business. The forecast of the increased market demand draws our attention to fulfill market opportunity through a collective act of science, knowledge and experience sharing, and political will to regional, national, and global solidarity for technical, financial and institutional support to address challenges in all value chains. She wished that the webinar will drive transformative action to the inclusive and sustainable industrial development in each member country.

Dr. Ir. Fadjry Djufry, M.Si, the Director General of Indonesia Agency for Agricultural Research and Development (IAARD), Ministry of Agriculture, Indonesia, delivered the opening remarks. He addressed that the establishment of coconut agroindustry could offer substantial growth in jobs and income, and thereby reducing poverty. The coconut sector has shared 0.1-3.5% of the GDP of several coconut-producing countries. IAARD through Indonesian Palm Crops Research Institute, Manado, Agricultural Post Harvest Research and Development, Bogor, and Assessment Institutes in 33 Provinces are working on some research and development of coconut and has released several superior coconut varieties and hybrids that have been distributed to smallholder farmers. Some collaboration with private industries to propagate the coconut also have been initiated. The IAARD are developing an integrated database application for estate crops that can provide valuable information using a mobile phone.

Ms. Lastiana Yuliandari, Founder and Director, Aliet Green, Yogjakarta, Indonesia, the first speaker a millennial women entrepreneur presented on "Sustainable Coconut Sugar Industry Impacts on the Economic, Social Life of Smallholder Farmers and the Environment: A Case Experience of Aliet Green Company". Aliet Green produces coconut sugar with 90% female workers and 1% farmers with disability. Aliet Green supplies its products to some reputable organic food and beverage manufacturers, and private labels for an organic retailer or supermarket chain. As the consumer now are concerned on certification, Aliet Green has received some certificates including organic and fair-trade certificates. Ms. Lastiana also mentioned about the risks faced by Aliet Green in this sector, including supply chain complexity, training, consistency and commitment. However, their effort to achieve Sustainable Development Goals through empowering female workers and reducing the poverty of farmers is quite challenging. Insufficient productive coconut palms, young people and skilled tappers are some of the challenges that must be solved.

Mr. Tomas B. Medina, Consultant, President and CEO, Brand Exports, the Philippines, presented on "Business Model for Integrated Coconut-Based Products: From the Initial Concept to Market Success". He described the business model for small, medium, and large processing enterprises in coconut sugar, such as availability of coconut areas that are dedicated to coconut sap collection, availability of workers, method, technology, consider by-products to be value-added, the requirement of health or other certification, quality and marketing of products, the challenges to be a stable and sustainable enterprise. These challenges could be solved by some models: diversity and equity, sustainability, inclusion, private and government sector partnership.

Dr. Anitha Karun, Director, ICAR-Central Plantation Crop Research Institute (CPCRI), India, presented "Inclusive Agribusiness Model for Coconut". She addressed that the coconut sector has the potential to support many rural businesses. Some of them have much export potential also. The availability of raw materials, technology and low capital investment make the sector most ideal for resource-poor farmers and first-time entrepreneurs. She also mentioned that in recent years, the Government of India is providing many incentives for the promotion of rural business that are incentives for food processing units and promoting one district one product, and now applied in more than 20 districts in India.

Mr. Benjamin Madrigal, Administrator, PCA, Chair, ICC Technical Working Group, delivered the closing remarks. He appreciated ICC secretariat for the initiative to conduct the webinar and other capacity building. He addressed that the sustainability of the enterprises cannot be done solely by the National Agricultural Departments but needs support by other national agencies.

The webinar was moderated by Ms. Mridula Kottekate, Assistant Director, ICC. *(ICC News)*

MSP FOR COPRA (DRIED COCONUT) FOR 2022 SEASON APPROVED BY CABINET

The Minimum Support Prices (MSPs) for copra for the 2022 season have been approved by the Cabinet Committee on Economic Affairs (CCEA), which is chaired by Prime Minister Narendra Modi.

According to the CCEA, the MSP for fair average grade milling copra was raised to Rs.10,590 per quintal for the 2022 season from Rs.10,335 in 2021, while the minimum price for ball copra was raised to Rs.11,000 per quintal for the 2022 season from Rs.10,600 in 2021.

The measure is intended to assure a return of 51.85% for milling copra and 57.73 percent for ball copra over the all-India weighted average cost of production, according to the cabinet. "The increase in MSP for copra for 2022 season is in line with the principle of fixing the MSP at a level of at least 1.5 times the all India weighted average cost of production as announced by the Government in the Budget 2018-19," it said.

The Commission for Agricultural Costs and Prices recommended the ruling (CACP). As one of the crucial and progressive measures toward doubling farmers' earnings by 2022, it guarantees a minimum profit margin of 50 percent.

The National Agricultural Cooperative Marketing Federation of India Limited and the National Cooperative Consumer Federation of India Limited would continue to serve as Central Nodal Agencies for price support operations in coconut-growing states at the MSP. *(Mint)*

PROCESSED COCONUT PRODUCTS SELL WELL IN THE CHINESE MARKET

The sluggish season in the Thai coconut industry spans from October through January of the following year. Furthermore, the continuing pandemic is fueling a global transportation problem, reducing the supply of coconut products even further. Importers of coconut-based products in China are so seeking to diversify their supply channels and stabilize their import volumes. Manager Su of a Guangzhou-based coconut processing company discussed local sales of coconut-based items as well as the import of fragrant coconuts from Thailand.

Manager Su began by discussing the various coconut-based goods that use aromatic coconuts from Thailand. In Thailand, the fragrant coconut is on a list of protected cultivars. The coconut is a tropical fruit. The coconut milk of fragrant coconuts is richer and more fragrant than the coconut milk of regular 'sweet water' coconuts, and the fragrant coconut is juicier as well. Thailand can produce coconuts all year round. The weather conditions are great for growing coconuts. And Thailand has a strong competitive position in the international market because their production volume is huge and the product quality is great. They mainly use fragrant coconuts from Thailand in the manufacturing of two products. The first is quick-frozen coconut water, that mainly sell those products to cold drink shops. The second is canned coconut meat. These cans with coconut chunks are mostly sold in the retail industry or to beverage shops where they are added as seasoning to drinks.

Coconuts come in a broad variety of shapes and sizes in Thailand. Coconuts can be aged by some processing companies, although the flavor is not as nice. To assure the greatest quality, they exclusively use aromatic coconuts. The pandemic's influence on the fruit trade has been

ongoing for nearly two years, and it has had a substantial impact on their coconut import. Under normal conditions, customs clearance takes only three days, but the additional disinfection treatments and other steps now take at least five days. Not only does distribution take longer, but it also increases labor and transportation costs. Coconuts used to cost roughly 4,000 yuan [627,91 USD] per container to transport from Thailand to Guangzhou, but now they cost at least 20,000 yuan [3,139.57 USD].

Despite the fact that the pandemic has made importation more difficult, canned coconut meat sales have increased in the last two years. Firstly, most coconut processing plants turn the coconuts into paste, with only a handful producing canned coconuts, despite the fact that canned coconuts are quite popular in the market. Secondly, many restaurants were closed or had a significantly smaller number of customers during the pandemic, but online sales exploded. Customers who would regularly frequent eateries were compelled to adjust their eating habits as a result of the pandemic. Instead, they placed their order on the internet. Even those who had never made an internet purchase before were enticed. When compared to two years ago, our canned coconut meat sales climbed by at least 15%. They have previously imported fragrant coconuts from Thailand through middlemen, but now that market demand has increased, they are aiming to establish direct contact with coconut production areas in Thailand. They want to set up a direct supply line from the manufacturing region to our processing plants. They intend to import about 100 coconut cargo containers every year. They want to link with coconut-growing regions in Thailand that have received G2 certification from the Thai Ministry of Agriculture. *(Fresh Plaza)*

ODETTE DESTROYS TEN MILLION COCONUT TREES, AND THE GOVERNMENT SEEKS REHABILITATION FROM THE COCO TRUST FUND

Typhoon Odette (Rai) cut down 10 million trees across the Philippines, a severe blow to the country's coconut growers, who are already among the poorest employees.

During a meeting with President Rodrigo Duterte, Philippine Coconut Authority Administrator Benjamin Madrigal Jr. detailed the extent of the damage to the coconut sector.

"Coconuts caused twenty-five percent of the damage to agricultural crops," he remarked in Filipino at the Malacaang gathering.

The majority (5.7 million) of the 10 million totally destroyed coconut trees were found in Mindanao's Region 13 (Caraga). 3.9 million trees were completely destroyed in Region 8, or Eastern Visaya. All over the country, 11 million trees were partially damaged, meaning they can still be rehabilitated.

In order to help clear the totally damaged trees in Caraga and Eastern Visayas, the PCA gave away 500 chainsaws to farmers. PCA personnel were on the ground to ensure only totally damaged trees were cut to make sure those that could still be rehabilitated are not further damaged, said Madrigal. The wood from the felling of totally damaged trees would then be used to build temporary shelters for people who lost their houses, he added.

To aid affected farmers, the PCA chief said current coconut programs will be concentrated on regions hit by Odette. Some P225 million in the agency’s coconut fertilization program can be channelled to Regions 4B (Mimaropa), Western, Central Visayas, Eastern Visayas, and Caraga.

Around P34.4 million from the intercropping program, which assists farmers with short-term crops such as vegetables, may also be directed to the impacted areas. The efforts, which include providing ruminant animals such as cows and goats, are aimed at providing farmers with a source of revenue or food while they nurse their coconut palms back to health.

Coconut Trust Fund is used

Odette's devastation of the coconut industry highlights the importance of putting billions of pesos in coconut levy monies to good use.

Madrigal wants to use the trust fund to assist farmers who have been impacted by Typhoon Odette. However, he stated that Duterte must still approve the Coconut Farmers and Industry Development Plan, as required by the statute that established the trust fund.

He also mentioned that as for the Coconut Farmers and Industry Development Plan, they are ready to implement, it is just going through vetting by different agencies.

According to law, at least P5 billion of the trust fund must be disbursed every year for the benefit of farmers. "Out of the P5 billion initial allocation, around P835 million can be devoted for rehabilitation and social protection to the regions mentioned. This can go to farm improvement, native livestocks to be given away to farmers, dairy program, crop insurance, on top of what [Agriculture Secretary William Dar] mentioned," said Madrigal. *(Rappler)*

THE COCONUT FACILITY AT GENERAL SANTOS HAS BEEN TRANSFERRED TO AGRARIAN REFORM BENEFICIARIES

The Department of Agrarian Reform (DAR) announced that a facility used to store and consolidate the produce of various coconut farms in the General Santos City region has been transferred to agrarian reform beneficiaries.

Tinagacan Agrarian Reform Beneficiaries Cooperative in Barangay Tinagacan, General Santos City, was the lucky beneficiary.

DAR's Linking Smallholder Farmers to Markets and Microfinance (LinkSFarMM) programme procured the facility.

"The project aims to store the whole coconuts without compromising its quality prior to its delivery. It will also be a good area for post-harvest activity such as de-husking of the coconuts while avoiding the direct sunlight which can affect the quality of the product," Provincial Agrarian Reform Officer Cenon S. Original said.

Member agrarian reform beneficiaries (ARBs) and smallholder farmers can store whole coconuts in the consolidation area and sell their products under an all-in scheme.

"The consolidation area for the cooperative's coconut business is worth P180,686, which would benefit 40 member-ARBs within the cooperative, and a total of 668 ARBs within the Tinagacan covering the barangays of Tinagacan, Batomelong, and Upper Labay, in the city of General Santos," Mr. Original said.

Access to the facility, according to the DAR, will boost productivity and expand market prospects for coconut farmers.

"We will strive to improve the services of the cooperative so that we can still get other projects from the government so that members and non-members, and even the next generations could benefit from it," the DAR said in a statement.

By connecting ARBs and farmers to the supply chain, LinkSFarMM aids in the development of agribusinesses. *(Business World)*

NEW HYBRID COCONUT VARIETY HAS RELEASED BY FIJI

The Ministry of Agriculture has launched an early fruit-bearing coconut cultivar as part of its efforts to improve coconut output for local and international markets.

Dr Mahendra Reddy, Minister of Agriculture, Waterways and Environment, unveiled the new Mua Hybrid Coconut type at the Ministry's Mua Research Station in Taveuni.

Mr. Reddy, who officiated at the occasion, said the introduction of this new type was a tremendous achievement for the Ministry because the project had been repeatedly hampered by natural catastrophes, which had taken their toll on the trial region.

The Ministered mentioned that this is a remarkable day and an achievement for the Ministry as this project was halted due to Tropical Cyclone Emi in 2003, as well as during other cyclones because our entire plantation of hybrid trees continued to be destroyed but they were able to revamp it, and today signifies the efforts behind our research team here in Mua to get this variety released out to our farmers.

This will do great service in terms of supporting farmers and exporters to quickly get the supply of larger volumes of coconut within a shorter period of time, and this Mua variety has been tested to do just that, as compared to the Fiji Tall variety. It also has a reasonably long period of production, 40 years or so, which isn't that bad when compared to the Fiji Tall variety.

The Minister want to boost the exports of both dried and green coconuts, there is an enormous demand for coconuts in the export market and he is also interested in growing the production and exports of green coconuts or bu because the market and demand for bu locally, through our tourism sector, and for the export market is huge.

Copra prices have risen, coconut oil prices have also seen a substantial increase in the market and we want to continue to push production and supply into the market.

He said some tree crops were long term but if proper research and innovation were done and shorter-term varieties of these tree crops were developed, then the Ministry of Agriculture was doing its role to assist farmers, exporters and contribute to the economy.

In the early 1980s, the Ministry of Agriculture's Research Division began working on coconut breeding.

Over the years, six different types of hybrids have been developed and their attributes analyzed, with this new Mua hybrid being the most recent.

At a glance

Mua hybrid is a fruit-bearing type that matures in 3-4 years (compared to Fiji Tall variety that bears fruit at 5-7 years).

It grows to a medium height of 10 meters in 20 years (compared to Fiji Tall that reaches 20-25m).

Mua hybrid has a higher yield than Fiji Tall, with 1.4 tonnes of copra per hectare. *(The Fiji Times)*

MEASURES TO PLANT COCONUT IN ALL BARREN PADDY LANDS

Environment Minister Mahinda Amaraweera of Sri Lanka said the Cabinet has resolved to allow coconut production on all non-cultivable paddy lands.

Due to a current lack of coconut saplings in the country, Mr. Amaraweera stated that arrangements have been made to publish a relevant circular granting permission for coconut cultivation in all barren paddy fields and providing Rs. 500,000 to each Divisional Secretariat to establish coconut nurseries.

He was addressing at the Ministry of Environment during a meeting of the Presidential Task Force for a "green socio-economy with sustainable solutions to climate change.".

Instead of passing over responsibility to the Ministry of Plantation Industries, the Minister stated that the Ministry of Finance has urged that all ministries use the money granted to them to assist this program.

At the meeting, a number of topics were discussed, including fertilizer, land, forest

protection and wildlife, estate development, and renewable energy.

Shasheendra Rajapaksa, State Minister for Agriculture, claimed that approximately 08 million liters of organic liquid fertilizer and 300,000 tons of organic fertilizer have been supplied to farmers in response to the current fertilizer crisis.

It was noted that increased fertilizer demand, as well as supply disruptions, might occasionally result in quality issues. However, it was found that the government will keep the organic farming program in place.

The Task Force also agreed to conduct a special meeting with State Minister Shasheendra Rajapaksa and his staff to discuss current agricultural challenges.

All of the sub-committees established under the Presidential Task Force on Green Socio-Economic Solutions to Climate Change, according to the Minister, are well-organized and working toward their goals.

The Chairman of the Task Force, Minister of Environment Mahinda Amaraweera, and the Secretary of the Task Force, Dr. Anil Jasinghe, Secretary to the Ministry of Environment, presided over the debate.

Through the Zoom application, State Ministers Duminda Dissanayake, Shasheendra Rajapaksa, Kanaka Herath, and a number of Ministry Secretaries and officials participated in the event. *(Colombo Page)*

COCONUT INDUSTRY PRODUCTS GENERATE $7000 IN FOREX PER YEAR – STATE MINISTER

Earnings from exporting coconut products amounted to $7000 annually. Such exports include jaggery and treacle, which are key products relating to the coconut industry, State Minister of Coconut, Kithul and Palmyrah Cultivation Promotion Arundika Fernando, Sri Lanka, said.

Despite its origins as part of the plantation business, coconut was now an important contributor to currency profits and to the country's economy, according to Fernando.

The State Minister Development noted that the coconut farms include value addition promotion to its diverse products, which is now important to sustaining the coconut plantations. Such development included propagation of 600,000 nursery plants for distribution among smallholders and large-scale plantations to add further progress to the industry. As a result, the coconut industry is part of the mainstream economy.

The coconut sector contributed a significant amount of money to the country's economy. The development of all items hinged on adding value. Coconut goods, which are widely used in related local industries, helped to add value. The private sector takes care of this effectively.

Kitul and palmyrah were being developed in collaboration with Jaffna University. "Export markets would include Europe, Canada, and the United States," he said, adding that soil testing and more inputs were planned for development. This is especially true of jaggery and kitul treacle. The total value of these exports would be around $2 million. *(The Island)*

ACTIONS TO PROMOTE 'CEYLON COCONUT' IN THE WORLD

Sri Lanka's Coconut Research Board claims that attempts have been done to market the "Ceylon Coconut" brand around the world.

By the end of 2023, efforts have been established to turn coconut into the country's highest-earning export crop. In addition to the 1000 million coconuts already collected for the business, plans have been established to provide additional 1000 million coconuts.It is planned to reach the goal through adding between 300 and 400 million coconuts by minimizing the 30 percent of coconuts wasted during domestic coconut consumption, another 200 to 300 million

coconuts were consumed in the United States due to reduced damage from animals and pests, while roughly 500 to 600 million nuts were produced as a result of increased output. Using proper agronomic techniques, including as moisture conservation, rainwater management, and fertilizer supplementation.

In addition, by combining IT into coconut agriculture, attempts are being made to provide value-added products to the market, to explore new worldwide markets, to enhance the use of machines, and to attract the younger generation.

Meanwhile, under the patronage of Minister of Plantation Industries Ramesh Pathirana and State Minister of Plantation Arundika Fernando, the 'Saubhagyaye Kapruka' National Program was recently launched at the Lunuwila Coconut Research Institute. *(Colombo Page)*

TENDER COCONUT PRICE CRASHES IN DHARWAD, KARNATAKA; VENDORS DISMAYED

The price of the tender coconut continued to rise for the better part of 2021, starting in the summer and continuing through the extended wet season, but the approach of winter has resulted in the cost dropping in Dharwad district. A surplus in the market has pushed the price of a tender coconut from Rs 35 to Rs 40 to Rs 20, much to the dismay of the traders who have been hard hurt by the abrupt decline.

Tender coconut is sent to Dharwad and other regions in North Karnataka from various districts in South Karnataka. In the taluks of Mandya and Maddur, the reduction in temperature had a negative influence on the wholesale market for tender coconut. Consequently, the crash in wholesale price – the rate dropped to Rs 12 to Rs 18 – resulted in many traders deciding against going ahead with transporting the tender coconut due to be supplied to Delhi, Rajasthan and Punjab. This resulted in the traders flooding the markets of North Karnataka, pushing the retail price down.

Parashuram, a wholesale trader, said, "We think that the wholesale price may fall further. It could drop to Rs 10 or even as low as Rs 8."

Zaheer, who sells tender coconuts along Club Road, said he and other sellers were eager to get rid of their supply as soon as possible, lest the price plummet. "We're compelled to sell the tender coconut, and we're only making a small profit." We are now selling tender coconuts for Rs 20 or Rs 25, but we are concerned that the retail price would drop to Rs 18," Zaheer predicted.

"There are more than 500 tender coconut vendors," said Ashraf, who sells tender coconuts on Gokul Road. "Few people choose to drink tender coconut water in the winter." As a result, the price drop is a double punch for us."

People should not be afraid to drink tender coconut during the winter, according to senior physician Dr. GB Sattur, because In the heat, sensitive coconut helps supplement potassium levels in our bodies, which we lose easily through sweat. Tender coconut water, on the other hand, can be sipped all year. However, because of its flavor, individuals may not want to drink it in the winter. *(The Times of India)*

THE COCONUT INDUSTRY BOARD CONSIDERS LEASED LANDS FOR CROP EXPANSION AFTER THE WATER VALLEY PROPOSAL WAS WITHDRAWN

The Coconut Industry Board (CIB) of Jamaica, which suggested a plan for commercial growth of the coconut sector five years ago, is now exploring using leased lands rather than owning assets to improve crop coverage.

The Coconut Industry Control Act of 1945 established the CIB as a legislative entity charged with encouraging best practices and industry growth. The board of directors presented a new plan for increasing output and commercial operations in 2018.The first phase of the CIB's commercial plan included the buildout of 3,800 acres of commercial orchards and 4,000 acres of

seedbed nurseries to supply one million seedlings per year.

The plan was approved by the Ministry of Agriculture and Fisheries (MoAF) in 2018, giving the green light for the acquisition of the 1,028-acre Water Valley Farm in St Mary, the 700-acre Unity Valley Farm, and the Richmond Cocoa Fermentary, both also in St Mary.

However, Yvonne Burns, general manager of the CIB, indicated that negotiations for Water Valley, the most advanced proposal, had been scrapped.

Instead, she said the board was now considering leased lands for crop expansion. The new position was also confirmed by Board Chairman Christopher Gentles who said that discussions had commenced with the MoAF over potential leases.

In 2018 the Coconut Industry Board pitched a $3-billion plan — developed with the help of consultants PricewaterhouseCoopers — which proposed ventures including coconut orchards, a green coconut water packaging plant, production of virgin coconut oil, and a cocoa fermentary.

The plan was to implement — on new acquisitions and existing properties — a mother/satellite farm basis, best practices in the growing of coconuts intercropped with cocoa and banana, along with the processing of coconut water and other coconut products.

The CIB had been planning a new seedling garden, nursery and farm on the Water Valley lands. However, Yvonne Burns indicated that the potential of the property to deliver returns began to be doubted.

She stated that the property was no longer being considered for purchase. The Coconut Industry Board has been soft-pedalling spending plans since the onset of COVID-19.

The investment plan was estimated to cost $3 billion, with the private sector expected to contribute a portion of the funding.

The International Trade Centre (ITC) and the Caribbean Agricultural Research and Development Institute are currently implementing the regional Coconut Industry Development for the Caribbean project, which is funded by the European Union and implemented by the International Trade Centre (ITC) and the Caribbean Agricultural Research and Development Institute (CARDI).

According to the MoAF, demand for a variety of value-added and by-products made from coconut is increasing around the world, including coconut shell charcoal, coconut milk powder, coconut cosmetics, coconut palm sugar, coconut flour, and coconut chips. *(Jamaica Observer)*

GOVT ANNOUNCES COCONUT PROCUREMENT FROM JANUARY

The Minister of Agriculture, P. Prasad, convened a high-level committee meeting in Thiruvananthapuram, India, that resolved to buy coconuts from farmers for Rs 32 starting in January. In light of the state's declining coconut prices, the decision was made to provide assistance to farmers. The state would ask the federal government to expedite the procurement of coconuts through NAFED.

To speed up procurement, the Agriculture Department Director is in responsibility of equipping panchayat-level committees and cooperative societies organized as part of the Keragramam initiative by KERAFED and Coconut Development Corporation.

Coconut and copra prices have fallen even lower than the Minimum Support Price. Despite the fact that the MSP for coconuts is Rs 32, farmers have only received Rs 29.

Agriculture production commissioner Tinku Biswal, agriculture department director TV Subhash, Kerala prices board chairman P Rajasekharan, agriculture additional director Anila Mathew, KERAFED managing director R Ashok, and representatives from NAFED and the coconut

development board attended the meeting. *(Mathrubhumi)*

15 LAKH COCONUT SAPLINGS TO BE PLANTED NEXT YEAR

P. Prasad, Kerala's Minister for Agriculture, has announced that 15 lakh coconut saplings will be planted across the state next year. He said after the Agriculture Department's Keragramam project in Manamboor grama panchayat was inaugurated.

The project, according to the Minister, aims to boost coconut production in a certain region. "Coconut palm is an emotion for Malayalis. Understanding the potential of virgin coconut oil, Kudumbashree members should start coconut oil units. Only on achieving self-sufficiency in vegetable production could price rise be prevented," he said.

At a cost of 50 lakh, the Keragramam project is being implemented over 250 hectares in 16 wards of Manamboor grama panchayat. Basin opening, mulching, distribution of irrigation pump sets and coconut climbing equipment, launch of organic fertilizer units, ensuring availability of chemical fertilizer and insecticides for coconut palms, cutting down infected palms and planting new ones, and intercropping in coconut plantations are just some of the activities included. *(The Hindu)*

ACTIONS TAKEN TO STRENGTHEN COCONUT INDUSTRY IN THE REGION

International Trade Centre (ITC), the Caribbean Agricultural Research and Development Institute (CARDI), and the Inter-American Institute for Cooperation on Agriculture (IICA) recently teamed up to help the region's coconut industry thrive.

The entities are attempting to boost awareness of the product's health benefits as well as its application in the food and beverage business through a virtually signed statement of intent inked last week, even as they develop new goods to assist wider market penetration.

This is due to the fact that worldwide coconut demand is at an all-time high and is expected to expand dramatically over the next ten years.

In the letter of intent, the signatories acknowledged the importance of cooperation across the areas of knowledge management, information dissemination, public-private production and commercialisation connections with Alliances for Action partners; capacity-building activities around production and processing and strengthened systems for improved sanitary and phytosanitary (SPS) compliance in the Caribbean.

The entities share the view that while the Caribbean has tremendous potential to become an active competitor in the global coconut marketplace, its pace of growth has been compromised by ageing plantations, lack of quality planting material, prevalence of pests and diseases, compounded by lack of investment, financial and technological constraints.

"This collaboration will help us to improve our implementation on the ground, scale up and help us align our policies in the region to support farmer organisations, and to expand coconut production and commercialisation. We're very sure that this will help us to reduce the risk of investing in value chains by collaborating with policymakers, buyers, financial institutions, and other organisations that will help to increase the capacity of smallholder farmers," stated William Castro Rodriguez, international consultant with the ITC.

"We continue to pledge our support to continue promoting integrated value chains into the Caribbean," he added. *(Jamaica Observer)*

DOST-PCAARRD PROVIDES NEW FUNDING FOR PH STUDIES ON COCONUT EMBRYOGENESIS

The Department of Science and Technology's Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST-PCAARRD) has provided a year's worth of funding to improve coconut somatic embryogenesis technology (CSet), which aims to increase the production of high-quality planting materials of selected coconut varieties in the country.

CSet is a coconut planting material propagation technology that uses plumular tissues from designated tall, dwarf, and hybrid varieties.The Philippine Coconut Authority-Zamboanga Research Center (PCA-ZRC) and PCA-Albay Research Center (ARC) are implementing the projects, "Propagation of Quality Planting Materials of Baybay Tall (BAYT), Laguna Tall (LAGT), and Tacunan Dwarf (TACD) Coconut Varieties through CSet" and "Propagation of Quality Planting Materials of Selected Tall, Dwarf, and Hybrid Coconut Varieties through CSet," respectively.

The project leaders are Dr. Susan M. Rivera of the PCA-ZRC, and Dr. Cristeta A. Cueto of the PCA-ARC.

"Both projects maintain and produce quality planting materials of selected coconut varieties, while also exploring protocol improvement to increase the regeneration efficiency of the PCA-ARC CSet protocol," the DOST-PCAARRD said in a statement.

"Using the secondary somatic embryogenesis pathway, the number of somatic embryos and regenerants produced is expected to hasten and increase," it explained.

The ex vitro transfer protocol is being modified, according to the Council, to improve the survival rate of fully developed and immature plantlets.

The term "ex vitro" refers to growing coconut planting material outside of a tissue culture, such as in soil or potting mix.

Several CSet-derived planting materials were planted in the PCA-ZRC compound in Zamboanga City early this year, according to the DOST-PCAARRD, while those from PCA-ARC will be planted by January 2022.

Cueto is also the leader of a project called "Gene Expression Analysis during Coconut Embryogenesis," which aims to figure out the genetic and molecular mechanisms behind CSet. "The project is currently awaiting the transcriptome sequences from South Korea of the ribonucleic acid (RNA) samples isolated from various developmental stages of somatic embryogenesis of the BAYT," the Council said.

"Further bioinformatics analysis will commence later on for the identification of genes associated with somatic embryogenesis, and eventually, develop gene markers for the refinement and standardization of the coconut response during in vitro culture."

In vitro is a process whereby cells or tissue samples of living organisms are maintained and cultivated in a controlled environment within a glassware or other laboratory vessel.

Dr. Maria Genaleen Q. Diaz served as a science and technology (S&T) consultant during the review and evaluation of the projects.

The meeting was held in preparation for the following year's project implementation, according to the Council.

Project team members from PCA-ZRC and PCA-ARC, as well as DOST-PCAARRD representatives led by Dr. Allan B. Siano, officer-in-charge of the Crops Research Division, attended the conference (CRD). *(Manila Bulletin)*

COCONUT VENDORS IN KOVALAM ARE MAKING AN ECO-FRIENDLY SWITCH

Take a note from these sweet coconut merchants in Kovalam, Kerala, India, if you're wondering how you might help make the world

plastic-free. They have replaced plastic straws with alternatives such as recycled paper straws, in addition to fully avoiding them.

Krishna KS, waste management and community engagement officer of Positive Shift for Marine Life, an Australian NGO created by Karl Goodsell, is guiding people toward this change. Krishna's new initiative, "Leave No Trace," urges street merchants with vending zones at tourist areas to utilize more environmentally friendly alternatives to single-use plastics.

Krishna says, "Over the past three years, we have been carrying out various activities in the coastal areas to combat waste disposal problems. One such initiative, a community-centric waste collection campaign, was implemented in two wards of Vizhinjam with over 150 families. Plastic collection bags were given to each of the families so that the trash doesn't end up in water bodies. The Leave No Trace campaign was conceptualised based on our recent survey across popular beaches in the district, where we identified the amount of plastic waste piling up," she said.

According to Krishna, during the beach survey, around 12,959 pieces of plastic were collected from the beaches in Kovalam in just 42 weeks. "On assessing the materials collected from the beach, we noticed that plastic straws, thermocol plates, plastic covers and spoons were the major pollutants," he said.

Krishna's team thought the first step is to sensitise tender coconut vendors against the use of single-use plastic straws since they have the most use for it. Presently, around 18 vendors from Kovalam and nine from Vizhinjam are a part of the programme. "Four vendors from Kovalam have started to replace plastic straws with paper ones. Initially, the total number of plastic straws used by these four vendors was 9,660 monthly. The programme helped eliminate around 4,800 straws in just one and a half months," said Krishna.

Jithin TV, a coconut vendor in Kovalam says, "I have been selling tender coconuts for around 10 years now. Volunteers of PCML helped us switch to paper straws and we have been getting plenty of positive feedback from customers. However, the scarcity of low-cost alternatives remains an urgent concern. A paper straw costs anywhere from 60 paise to one rupee, but a plastic straw costs them 10-15 paisa. To assist them, we are providing a three-month stipend for paper straws. Following that, they will be requested to add one rupee to each customer's bill to assist balance the budget. "We want to persuade at least 50 vendors to switch to eco-friendly options," Krishna says. *(The New Indian Express)*

AFFORDABLE AND CLEAN ENERGY: CHARCOAL BRIQUETTES FROM COCONUT WASTE

The United Nations has put much emphasis on clean and sustainable energy, subsequently, its focus is set on achieving Sustainable Development Goal number 7 by investing in solar, wind, and thermal power, improving energy productivity, and ensuring energy for all by the year 2030.

Indeed, about 3 billion people, or more than 40% of the world's population, cook with polluting and unhealthy fuels. SME's such as Kencoco Ltd. make Eco-makaa Briquettes, which are odourless and smokeless charcoal briquettes made from recycled agricultural coconut waste (coconut shells, husks) and charcoal dust. This product is a low-cost alternative to fuels like firewood, kerosene, and wood charcoal, with high heat combustion characteristics.

Kencoco, located on Kenya's coast in Kilifi county, was founded in 2016 by its CEO, Said Twahir, who saw a need to protect the environment while simultaneously reducing health hazards among the rural population. "We started this project in 2016 as we were visiting our relatives. We discovered that they were using firewood to cook in their homes, and it was full of smoke. So, we tried to find a way of alleviating the problem and discovered that we could make charcoal briquettes from coconut waste which was smokeless, and has as much energy as wood

charcoal and it burns longer and it cooks more food," Said Twahir CEO Kencoco says.

With population explosion that is heavily dependent on wood fuel, which has led to deforestation, briquettes offer a practical solution to supplement the use of wood as fuel. They are produced by compressing biomass residues like charcoal dust, sawdust, other wood remnants, or agricultural byproducts into a solid unit that is used as charcoal or firewood. If the base materials do not hold together well, a binding substance such as soil, clay, or starch is added. For use in the home, briquettes made from carbonized biomass are preferred, while non-carbonized briquettes are mostly used for industrial purposes.

Indeed, Twahir adds that, for every tone of wood charcoal, that is made almost 20 mature trees are cut down, so we believe that to reduce deforestation, we need to find alternative fuels that are sustainably made, of which ours is made from coconut waste. Kenyan government for example has targeted 2028 as the period in which the majority of people should be using sustainable clean energy in line with the UN goals.

The UN adds that expanding infrastructure and upgrading technology to provide clean and more efficient energy in all countries will encourage growth and help the environment.

Kencoco which now processes between one and one and a half tonnes of briquettes has employed six female workers who are involved in picking and sifting through the materials as well as processing the coconut husks into briquettes.

The briquettes are an alternative source of energy which is odourless and smokeless charcoal briquettes from coconut shells and husks and charcoal dust. It takes almost 48 hours for the briquettes to be completely dry and ready for market.

Twahir says: "We have three workers normally to take the briquettes out to the drying shed. The shed is made of UV-Treated material so that it can dry the charcoal faster than in the sun."

Kencoco supplies mostly to the hotels, restaurants, and resellers and also to households. They pack them in bags of 4kilogrammes to 25 kilos fetching between 2 U.S. Dollars for the 4kg bag and 10 U.S. Dollars for the 25 kg bag.

Briquettes are more environmentally friendly and energy efficient, and they might be a game changer in terms of reducing forest pressure and lowering pollution levels in cities if more people use them.

The researchers discovered that using slow-burning charcoal dust and soil briquettes reduced household cooking energy expenditure by 70% if families produced their own and 30% if they purchased briquettes from other sources in Kenya's capital Nairobi's informal settlement of Kibera, one of Africa's largest slums.

Briquettes are well-suited to circular bio-economy initiatives, which aim to reduce waste and promote more sustainable bioresources and market-based activities while maintaining rural-urban connections. *(CGTN Africa)*

AKUAPEM SOUTH MUNICIPALITY TO DISTRIBUTE 100,000 HYBRID COCONUT SEEDS

The coconut would be ready for harvest in four years, according to Mr Frank Aidoo, the Municipal Chief Executive (MCE).

Mr Aidoo made the announcement during the Municipality's observance of National Farmers Day.

The best farmer was Ms Ernestina Ohene, 58, a native of Dago in the Akuapim South Municipality.

She owns a seven-acre cocoa farm and a five-acre rubber plantation, among other things, and plants plantain, cocoyam, yam, oil palm, coconut, and cassava.

The Best Farmer in the Municipality of Akuapem South for 2021 is also an agro-processor and an animal farmer. The celebration was on the

sub-theme: "Eastern commodity satellite markets: a game-changer in consolidating food systems in Ghana under Planting for Food and Jobs (PFJ). Together we grow! Together we sell!"

In attendance was the Member of Parliament (MP), Municipal Chief Executive (MCE), Municipal Director of Agriculture, Municipal Coordinating Director, the Chief of Aburi and other security officers.

Twenty farmers were honored for their dedication to crop and animal farming, aquaculture, agro-processing, and farmer-led cooperatives.

Plantains, cassava, yam, maize, vegetables, pineapples, and live catfish were among the crops that added color to the event.

Students from the Akuapem Vocational Technical Institute also demonstrated a variety of local organic delicacies, which were served at the conclusion of the event. *(News Ghana)*

TRADE NEWS

INDUSTRY PERSPECTIVE

Prices tracked higher this week, extending last week's higher close.

In Rotterdam market, trading in coconut oil slowed with only a couple of nearby trades reported, down from last week's seven, concluded at $1,850 and $1,960/MT CIF. Traded prices were comparatively higher than previous week range at $1,750-1,830/MT CIF. Opening quotes were firmer at $1,870-1,906.75/MT CIF for positions from December/January through to June/July 2022 and continued to head higher until the close influenced by gains in palm oil. By week's end, levels settled firm at $1,960-2,015/MT CIF.

The palm kernel oil market similarly was lackluster and like last week, reported only a single turnover done earlier this week at $2,080/MT CIF, higher than week-ago at $2,010/MT CIF. Paying level was at $175 premium over coconut oil for the same nearby traded position. Market likewise opened firmer at $1,820-2,100/MT CIF for positions from December/January through to June/July 2022 and rose further higher tracking palm oil to conclude the week firm at $1,890-2,270/MT CIF.

Coconut oil continued at a discount under palm kernel oil for the second week in a row this week, notably in positions up to the first quarter of 2022, at widened spreads currently. Thus, average discount under palm kernel oil dipped at $15.05/MT this week from $11.27 in the preceding week. Price premium/discount per position are shown following: December/January -$220.95 (-$128.35 last week); January/February -$94.50 (-$26.80); February/March -$39.65 (-$21.30); March/April -$30.15 (-$13.30), April/May $2.00 ($17.20); May/June $25.00 ($46.35); June/July $67.00 ($47.29); July/August $170.83 (new position).

At the CBOT soya complex market, soybean futures tracked mostly lower this week, after opening in the upside supported by interests in product soybean meal from the animal feed sector. Weakness was tied to bearish export sales report from USDA and decline in Chinese imports compared to year-ago.

At the palm oil section, prices tracked higher during the week on improved export demand particularly from major importer India amid seasonal production tightness in both top producing countries Indonesia and Malaysia. Industry reports indicated exports for first half November from Malaysia improved. Moreover, reports from India showed palm oil regained its market share in the country's vegetable oil imports mix in oil year 2020/2021 at 63% after contracting at 55% in prior oil year. In the last three years prior to contraction, its market share had ranged 60-63%. Adding to the positive market sentiment were price gains in competing vegetable oils notably soybean oil. Market, however, closed lower this week tracking reversal in soybean oil trend.

Prices of tropical oils for nearest forward shipment bounced back this week across the board from respective levels of prior week with lauric oils advancing rapidly. Coconut oil hiked $122.40 from $1,835.65 last week to $1,958.05/MT CIF presently; palm kernel oil leaped $215 from $1,964 to $2,179/MT CIF. Palm oil moderately rose $11.00 from $1,381 to $1,392/MT CIF. With coconut oil's slower pace of price increase, it continued discounted under palm kernel oil, widening the spread from -$128.35 last week to -$220.95 in the current week. However, coconut oil maintained its price premium over palm oil, increasing from last week's $454.65 to $566.05/MT this week. *(UCAP Bulletin)*

MARKET ROUND-UP OF COCONUT OIL

In Rotterdam coconut oil market, business was thin but concluded at higher prices. Only December/January was traded this week at $1,850 and $1,960/MT CIF; other positions were quiet. Market was firm this week and closed with sellers at $2,015 for December/January; $2,000 for January/February; $1,995 for February/March; $1,960 for March /April, April/May, and May/June; and $1,970/ MT CIF for June/July and July/August. Buyers closed at $1,930 for December/January; $1,925 for January/February; $1,902.50 for February/March; $1,910 from March/ April; $1,875 for April/May; $1,827.50 for May/June; and quiet for other positions. *(UCAP Bulletin)*

COCONUT INDUSTRY PRODUCTS RAKING IN FOREX TO THE TUNE OF $ 7000 YEARLY – STATE MINISTER

Coconut product exports brought about $7000 each year. State Minister of Coconut, Kithul and Palmyrah Cultivation Promotion Arundika Fernando remarked that such exports include jaggery and treacle, which are major goods related to the coconut industry.

Despite the fact that coconut was not given sufficient recognition as part of the plantation business, it was now a considerable contributor to currency profits and the country's economy, according to Fernando.

According to The State Minister, development of the coconut plantations includes value addition promotion to its various products, which are now key to sustaining the coconut plantations. Such development included propagation of 600,000 nursery plants for distribution among smallholders and large-scale plantations to add further progress to the industry. As a result, the coconut industry is part of the mainstream economy.

The coconut industry made a substantial financial contribution to the economy of the country. Value addition in all products was key to development. Coconut products, used extensively in allied local industries, were contributors to value addition. This is efficiently handled by the private sector. Collaboration with the Jaffna University was on-going to develop kitul and palmyrah. Soil testing and further inputs were envisaged for development.

Export markets would include Europe, Canada and the US. This is particularly true of kitul treacle and jaggery. Value of these exports would reach approximately $2 million. *(The Island)*

COCO OIL RECORDS BIGGEST JUMP IN PH EXPORT VALUE

Growth in the coconut industry is apparent after data released by the Philippine Statistics Authority (PSA) on Friday showed that of the 10 major commodity groups in terms of the value of exports, coconut oil recorded the highest annual increase of 76.9 percent.

Cathodes and sections of cathodes and refined copper (56 percent), and chemicals (53.7 percent) were the next top performers.

The country's total external trade likewise increased.

"For October 2021, the total external trade amounted to USD16.84 billion. It grew at an annual rate of 15.2 percent. In the previous month, the annual increase was recorded at 17.1 percent, while a decline of minus 10 percent was recorded in October 2020," the PSA data stated.

By commodity group, electronic products continued to be the top export in October with total earnings of USD3.65 billion, or 57 percent of the total exports during the period.

This was followed by other manufactured goods with an export value of USD350.18 million (5.5 percent) and other mineral products worth USD298.48 million (4.7 percent).

Exports to China comprised the highest export value amounting to USD1.01 billion or a share of 15.8 percent of the total exports in October.

Other major export trading partners with their export values and percentage shares were the US with USD962.31 million or 15 percent, Hong Kong with USD865.62 million (13.5 percent), Japan at USD859.67 million (13.4 percent), and Singapore at USD390.59 million (6.1 percent).

The Philippine Coconut Authority (PCA) reported earlier that coconut oil and crude coconut oil are two of the top US imports from the Philippines.

Commissioner Eric Elnar of the Philippine Trade and Investment Center in Los Angeles, California previously said the Philippines accounts for 60 percent of US coconut oil imports and 73 percent of US crude coconut oil imports.

The rise in demand was due to changes in US trade policy, market trends, and dietary guidelines, he explained.

For one, a surge in consumption followed the withdrawal of US guidance that implicated coconut as a source of allergies.

Market demand for organic products and improved awareness of the benefits of a healthy lifestyle also contributed to the coconut oil boom.

"To meet the changing market demand, the office took advantage of the online shopping market trend that had become mainstream during the pandemic, while still maintaining distribution among traditional physical stores selling coconut products. Another avenue tapped was the growth of the reseller market led by Filipino-Americans running micro, small and medium enterprise caravans," the PCA said in a previous statement. *(Philippine News Agency)*

IN LAKSHMIPUR, COCONUT HUSK TRADING HAS GROWN IN FAVOR

According to dealers in the industry, demand for coconut fibre and coconut dust has escalated to the point that the items are being sold in advance of production.

Coconut husks were once dumped, according to traders, even ten years ago. Some people used it as a source of energy. However, coconut husk has become a pricey commodity.Abdur Rahim, a trader of coconut products from Haiderganj Bazar at Raipur upazila in Lakshmipur, said, "Not only coco fibre, but coco dust also is now a valuable substance for the last 2-3 years. Coco fibre is one of the main ingredients for making various products such as floor mats, doormats, brushes and mattresses while coco dust is one of the ingredients used in soilless roof gardens, seedlings production, livestock and poultry farms.

Lakshmipur, one of the major coconut producing districts, is the main hub of coco fibre and coco dust production in the country.

According to the Department of Agricultural Extension (DAE) in Lakshmipur, coconut is produced on 2,735 hectares of land in the district. Besides, there are coconut trees almost in every household. About five to six crore dried coconuts are produced in the district every year.

Coco fibre and coco dust are produced in processing factories from dried coconut husk.

Coconut buying and selling warehouses and coir processing factories have been set up at Haiderganj in Raipur upazila; Dalal Bazar in Sadar upazila; Mandari, Chandraganj, Panpara in Ramganj upazila; Mirganj, Sonapur, Hajirhat in Kamalnagar upazila; and Alexander and Zamindarhat in Ramgati upazila of the district. There are 30 small and big coir processing factories in these areas. At least 10-12 workers work in each factory.

Abdur Rahim, a coconut trader in Haiderganj Bazar, said, "Several tonnes of coir is turned into coco fibre every day in each factory. Due to the huge demand, coir processing factories are increasing in different parts of the district every year. Fibre worth Tk1.5-2 crore is sold annually from each factory."

Tofail from the same area said, "Only two years ago, coir from one coconut was sold at 50 paisa, but now the price has increased to Tk5-6. After making fibre from the husk, a 20kg bundle of fibre is sold at Tk500-600. Every week, each factory produces 4-6 truckloads of fibre. After excluding all expenses, each factory earns more than Tk50,000 per month."

Md Zakir Hossain, the owner of Satata Traders in Dalal Bazar, said, "We make coco fibre from coir. Buying fibre from us, different companies make coir felt which is used inside the mattress."

The powder produced from the coir while creating fibre is used to make coco dust, which is used for growing vegetables without soil, according to Md Anwar, the proprietor of a nursery. Coco dust is becoming increasingly used as a soil alternative for seedling culture. As a result, coir powder is presently in high demand. Around 160 kg coco dust can be produced as a by-product from 1,000 coconuts. A 20kg sack of coco dust is sold at a wholesale price of Tk140-160.

In this regard, Shahriar Islam Khan, Extension Officer of Lakshmipur BSCIC Industrial City, said, "Many coir processing factories have been set up in in the district, creating employment for many people. The economy of the district is prospering as a huge market has been created centring on these two unconventional commercial products. About Tk50 crore is earned annually from coco fibre and coco dust." *(The Business Standard)*

OTHER VEGEOIL NEWS

INDIA'S APEX VEGETABLE OILS INDUSTRY BODY CALLS FOR IMPLEMENTATION OF OILSEED MISSION

Against the backdrop of the country's rising edible oil import bills, the Solvent Extractors' Association (SEA) of India has said that the Government needs to implement the National Mission on Oilseeds as a special program and execute it on a mission mode if tangible results are desired.

In a letter to the members of SEA of India, Atul Chaturvedi, President of SEA of India, said that India's dependence on import of edible oils is nearly 65 per cent of the total consumption of about 22 to 22.5 million tons.

He said the country is compelled to import nearly 13-15 million tons to bridge the gap between demand and domestic supply.

Import has been reduced to nearly 13 million tons in the last two years due to the Covid pandemic. In 2019-20 the import of edible oils dropped to 13.2 million tons valued about ₹71,600 crore. In 2020-21, India imported similar quantity but import bill jumped by 63 per cent and touched an alarming level of ₹1.17 lakh crore due to hike in inter- national prices of edible oils. He said import of edible oil is the third largest item on import bill next only to crude petroleum oils and gold. With the country moving towards normalcy and edible oil consumption picking up,

any delay on this count will compound the problems, he said. *(UCAP Bulletin)*

MALAYSIAN PALM OIL INDUSTRY TO TAKE FULL ADVANTAGE OF DRONE TECHNOLOGY

A report in Bernama news, Kuala Lumpur, says Malaysia expects to benefit from the use of drone technology in the palm oil sector within the next three years, according to Minister of Plantation Industries and Commodities Datuk Zuraida Kamaruddin. She said drones equipped with artificial intelligence (AI) to identify ripe fruits and capable of transporting fruit bunches would be used.

This is anticipated to encourage young people to work in palm oil industry and increase local workers as well as ensure foreign workers to remain in the industry, she said when winding up the Committee-level debate on the Supply Bill 2022 in the Parliament last week. The government has also proposed the use of government-to-government mechanisms so that the recruitment of foreign workers and agents, incentives, and salaries to be provided can be made transparent with the country of labor resources to ensure the country remains competitive. *(UCAP Bulletin)*

CARGILL BECOMES FIRST GLOBAL EDIBLE OIL SUPPLIER TO COMMIT TO WHO TRANS-FAT RECOMMENDATION

Cargill claims to be the 'first' global edible oil supplier to commit to World Health Organization (WHO) recommendations on trans-fatty acids across its entire fats and oils portfolio, including in countries where there is no legislative requirement to do so. The company has said that the edible oils it supplies will be in line with the WHO recommend standard of a maximum two grams of industrially produced trans-fatty acids (iTFA) per 100 grams by the end of 2023. This in effect may also help Cargill's customers comply with WHO recommendation.

Announcing the move, Cargill noted that over the last 25 years it has removed an estimated one billion pounds (nearly 500,000 MT) of iTFAs from the global food supply, resulting in approximately 89% of its global edible oils portfolio already meeting the WHO's iTFA best practice. With this commitment, the company will now achieve 100% compliance, including in countries where there is currently no legislative mandate. To achieve the remaining 11%, the company is significantly investing in upgrades of several facilities to reduce the amount of iTFAs produced during the oil manufacturing process and leveraging decades of innovation expertise to provide food customers alternative formulations that will help them meet WHO recommendation.

To support the WHO's efforts, Cargill will also support the industry through engagement with targeted regional and national stakeholders, such as governments and oil industry federations, to support industry-wide reformulations particularly in countries where legislation is not yet in place. *(UCAP Bulletin)*

HEALTH NEWS

VCOP URGES SCIENCE DEPARTMENT TO SUPPORT RESEARCH ON VCO AS PROPHYLAXIS AGAINST COVID

Philippines' foremost virgin coconut oil (VCO) industry association is urging the Department of Science and Technology (DOST) to support research and development on VCO as prophylaxis against Covid-19, and not as cure. Engineer Marco Reyes, president of the VCO Producers and Traders Association of the Philippines, Inc. (VCOP), said that prevention against Covid-19 infection and transmission was better strategy in the war against the corona virus.

"VCO is a natural, sustainable and highly renewable resource of our country that is accessible and affordable for all Filipinos," he said. "We must remain open minded, thorough, and

aggressive in undertaking scientific studies on the use of virgin coconut oil against this virus." Reyes issued the statement after the DOST announced the interim findings of the University of the Philippines-Philippine General Hospital (UP-PGH) clinical trials on VCO as a Covid-19 adjunct therapy to moderate and severe patients, which showed no "significant benefits' of VCO to Covid-19 cases.

Reyes shrugged off the findings of the UP-PGH clinical trials, saying that there have been other studies, particularly from the trial conducted in Laguna last year by the DOST-Food and Nutrition Research Institute, which showed that VCO had shortened the recovery period of suspected and probable Covid-19 cases among trial participants. *(UCAP Bulletin)*

FIVE OPTIONS AS THE OTHER WHITE MEAT, COCONUT IS REPLACING ANIMAL PROTEIN.

Texture, look, and flavor are all important factors. These are the three qualities that make plant-based animal protein alternatives work, and given that coconuts are so versatile in texture and appearance, absorb flavors so easily, provide a variety of nutritional benefits (high levels of manganese, copper, iron, and fiber), and have so many potential uses (such as coconut butter, coconut flour, coconut oil, coconut meat, coconut water, coconut milk, and shredded coconut), it's easy to see why.

Coconuts are high in good fats, which assist to regulate blood sugar, reduce inflammation, and provide energy to the nervous system. Here are the top five ways coconut is being used as an animal protein substitute.

Bacon

Salty, smokey, and crunchy all at the same time! Baked coconut flakes have a crunchy texture that absorbs the aromas of smoked paprika with maple syrup or barbecue-flavored spices like Peppatree Jamaican Zesty BBQ spice, making it a healthier alternative to everyone's favorite animal-based delight.

Gaz Oakley, a vegan chef based in the United Kingdom, elevates his Brussels sprouts with coconut bacon made of coconut flakes, maple syrup, sweet smoked paprika, soy sauce, and coconut oil, while a Local Market Salad with fresh greens generously adorned with the crispy salad topping can be found at Cayman Cabana Oceanside Resto Bar in the Cayman Islands. Try a spinach melt with a side of coconut bacon at Plant Theory in Miami Beach, or pick up some Phoney Baloney Coconut Bacon bits at the grocery for only 15 calories per serving.

Fish

Between 2021 and 2031, the global plant-based fish market is expected to grow at a CAGR of around 28%, and given that coconut meat makes an excellent fish substitute due to its texture and ability to absorb flavors, there has never been a better time for coconut meat to step in as a fish alternative. The plant-based Coconut Ceviche, made from the meat of fresh young and firm Caymanian coconuts, fresh onions, local scotch bonnet seasoning peppers, fresh herbs and limes, garnished with local mangoes when in season and served with fried local breadfruit and sweet potato chips as scooping spoons, is the most popular item on the menu at farm-to-table restaurant Cayman Cabana Oceanside RestoBar in the Cayman Islands, for example.

Burger Patties

Coconuts have a unique flavor that pairs nicely with salsas, dips, and chutneys when used in plant-based patties or as a substitution for traditional ingredients in plant-based burgers. Coconut milk is made in the Philippines from grated or shredded coconut meat known as Sapal ng niyog or coconut pulp, which is then used to make burger patties. The sapal burger, also known as the niyog burger, is a Keto-friendly ovo-vegetarian cuisine that contains eggs as well as flour, onions, garlic, soy sauce, and kinchay (flat leaf parsley). Not only does the sapal burger have a delicious coconut flavor, but the use of coconut pulp reduces waste in the traditional process of obtaining gatâ (coconut

milk), which is used to prepare a variety of Filipino meals known as Ginataan.

Animal fat

Coconut oil has a higher saturated content than other plant-based oils, giving it a mouthfeel similar to animal-based oils. As a result, all substitute meats that claim to "taste like the real thing" appear to contain coconut fat or oil. In their plant-based burgers, Beyond Meat and Impossible Burger use bits of coconut oil to replicate animal fat. Hooray Foods has also used proprietary emulsion-forming technology with special ingredients: coconut oil, rice flour, tapioca starch, liquid smoke, umami seasoning, maple syrup, salt, and beet juice concentrate in its plant based bacon, that critics say tastes surprisingly like the real thing. Israeli startup Redefine Meat 3D-printed beef substitute that reportedly mimics flank steak also makes use of coconut fat as a critical ingredient. Given that coconut oil consists of between 80 and 90% saturated fat, however, doctors advise that it should be consumed sparingly. As a result, produced animal fats (made in the lab) may begin to take the place of coconut oil as an alternative for people who are not adverse to eating lab-grown animal protein.

Milk

Coconut milk has one-third the calories and half the fat of cow's milk. It's no wonder that it's become one of the most popular dairy substitutes, giving sweetness without the added sugar, and it's expected to continue to grow at a Compound Annual Growth Rate of 7.6% between 2021 and 2031 (Future Market Insights). In addition to drinking milk, coconut milk is now widely used as a dairy substitute in yogurt, ice creams, and vegan desserts, with brands such as Yoplait, So Delicious, Silk, Chobani, and Purely Decadent joining the trend. Restaurants are also becoming more inventive. The Hempist, a vegan restaurant in Hastings Old Town, UK, serves a luxurious "cheesecake" made of coconuts, while coconut milk ice cream with mango purée and almond crumbs can be found at Takoi, an Asian fusion restaurant in Detroit, Michigan. *(Forbes)*

COCONUT RECIPE

SPICY COCONUT PALM HEART SALAD

Ingredients

500g (about 2½ cups) coconut palm heart (apical bud), sliced into 4cm strips
4 cups water
2½ tsp salt
5 shallots, sliced
2 garlic cloves, sliced
2 large red chillies, sliced
10 small red chillies, sliced
2 tbsp lime juice
1½ cup dried anchovies, fried
1 cup grated coconut, toasted

Preparation

1. Boil water with 2 tsp salt and blanch coconut palm heart for 5 minutes. Drain well.
2. In another bowl, mix all sliced ingredients, lime juice, sugar, shrimp paste and remaining salt.
3. Add coconut milk, anchovies and palm heart.
4. Top with toasted grated coconut
5. Makes 10 servings.

(Bon Appetit)

STATISTICS

Table 1.Indonesia's Monthly Exports of Coconut Oil (in MT), 2019 - 2021

Month	2019		2020		2021	
	Volume (MT)	Value (FOB) US$'000	Volume (MT)	Value (FOB) US$'000	Volume (MT)	Value (FOB) US$'000
January	56,095	43,858	56,440	47,671	41,112	58,282
February	57,658	45,230	46,030	41,364	54,471	78,304
March	58,271	43,485	46,854	41,439	42,893	63,982
April	35,877	26,490	46,063	39,796	43,675	65,594
May	61,554	43,647	35,782	29,483	66,712	105,704
June	48,995	33,869	52,717	45,326	48,582	78,866
July	50,533	33,833	66,368	56,217	71,449	113,089
August	44,588	30,072	35,509	32,054	39,908	62,834
September	38,055	26,117	30,193	29,969	47,107	70,877
October	51,608	35,799	45,747	46,675	42,489	67,385
November	44,616	31,236	44,483	50,805	57,478	95,763
December	62,963	49,628	50,872	67,088	55,571	98,543
Total	**610,812**	**443,266**	**461,704**	**409,993**	**611,448**	**959,223**

Source: BPS-Statistics Indonesia

Table 2. Philippines's Monthly Exports of Coconut Oil (in MT), 2017 - 2021

Month	2017	2018	2019	2020	2021
January	142,042	83,573	76,557	115,346	52,302
February	72,442	35,743	44,265	59,757	53,704
March	84,355	82,848	122,223	91,762	72,143
April	57,530	69,532	123,057	53,629	58,555
May	57,160	68,968	100,580	61,034	51,927
June	52,277	99,482	135,308	92,625	65,091
July	68,084	46,825	94,690	19,161	78,441
August	90,822	72,360	197,300	85,963	80,111
September	82,537	93,124	75,126	83,382	82,648
October	65,944	80,655	100,758	58,911	93,101
November	73,983	126,627	67,636	63,150	
December	65,456	94,487	101,826	55,353	
Total	**912,632**	**954,224**	**1,239,326**	**840,073**	**688,023**

Source: Philippine Statistics Authority

Table 3. International Prices of Selected Oils, January 2019 - December 2021, (US$/MT)

Year	Month	Coconut Phil/Indo (CIF. Rott.)	Soybean Oil Dutch (FOB ex-mill)	Palm Oil Malaysian (CIF. Eur.)	Palm Kernel Oil (CIF. Rott.)	Sunflower Oil EU (Fob. NW. EU)
2019	January	773	748	585	765	688
	February	710	773	603	695	700
	March	679	750	573	655	711
	April	669	734	588	636	713
	May	661	743	563	573	722
	June	636	743	552	542	725
	July	657	748	544	555	754
	August	719	793	586	619	776
	September	724	779	580	613	776
	October	720	771	591	594	776
	November	836	775	683	756	776
	December	1,016	821	770	945	805
2020	January	1,062	874	835	955	807
	February	875	800	729	802	823
	March	834	748	635	689	730
	April	840	680	609	721	732
	May	831	684	574	678	738
	June	920	752	652	761	788
	July	886	821	659	704	833
	August	954	867	703	756	877
	September	1,034	906	741	788	1,041
	October	1,105	915	758	801	1,040
	November	1,380	974	918	1,073	1,176
	December	1,459	1,023	979	1,193	1,241
2021	January	1,463	1,099	990	1,368	1,276
	February	1,445	1,124	1,020	1,360	1,363
	March	1,541	1,285	1,030	1,479	1,611
	April	1,660	1,386	1,078	1,487	1,573
	May	1,715	1,575	1,136	1,531	1,585
	June	1,671	1,518	1,004	1,400	1,297
	July	1,584	1,468	1,063	1,274	1,282
	August	1,494	1,434	1,142	1,341	1,356
	September	1,485	1,399	1,181	1,427	1,310
	October	1,923	1,484	1,310	1,818	1,421
	November	1,961	1,443	1,341	2,050	1,416
	December	1,696	1,411	1,270	1,861	1,362

Source: Cocommunity and Oil World

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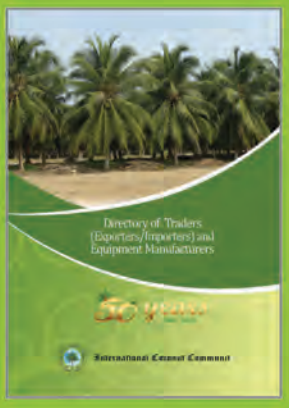

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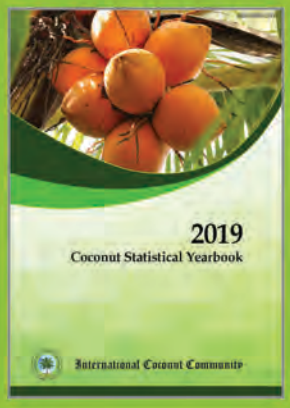

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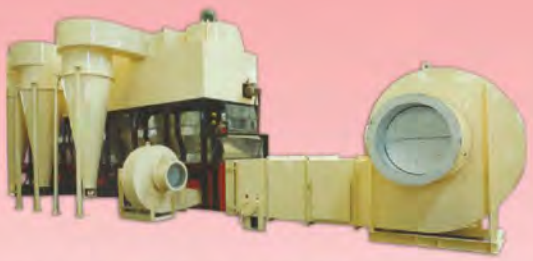
Output Capacity : 1000 to 2500 Kgs/hr.
Two Stage and Three Stage Dryers.
Apron width : 2640mm and 3250mm

COMBINATION DRYER

for Desiccated Coconut Granules, Chips,
Toasted D/C & Parings.
Output Capacity : 300 to 1000 Kgs/hr.



VIBRATORY FLUID BED DRYER

for Desiccated Coconut Granules & Parings.
Output Capacity : 300 to 1000 Kgs/hr.

GRINDER

Output Capacity:
1000Kgs/hr.

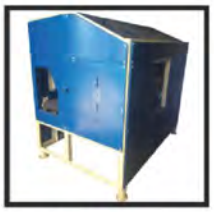
BLANCHER

Output Capacity :
1000 to 4000 Kgs/hr.

NOVATEX SCREENER/GRADER

Output Capacity :
1000 to 1500 Kgs/hr.

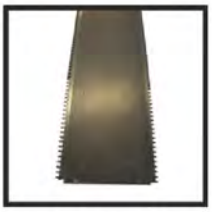
DESHELLING MAHINE
Output Capacity :
250 to 300 nuts/hr.



DEHUSKING MACHINE
Output Capacity :
1200 nuts/hr.

OIL EXPELLER

RADIATOR
Extruded Fins or
Plate Fins Type



STAINLESS STEEL PERFORATED APRON TRAYS
Width: 2640mm & 3250mm

STAINLESS STEEL CHAIN

GEM

GEMTECH PROJECTS LLP.

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BY AIR MAIL

The ***COCOMMUNITY*** is the monthly Newsletter of the INTERNATIONAL COCONUT COMMUNITY (ICC) incorporating current news, features, statistical data, business opportunities, and market information relating to the world coconut industry.

Established in 1969, under the auspices of the United Nations Economic and Social Commision for Asia and the Pacific (UN-ESCAP), the ICC is an independent regional intergovernmental organization which consist of twenty member countries and accounts for 85-90% of the world production of coconut . The ICC member countries are: the Federated States of Micronesia, Fiji, Guyana, India, Indonesia, Jamaica, Kenya, Kiribati, Malaysia, Marshall Islands, Papua New Guinea, Phillipines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor Leste, Tonga, Vanuatu, and Vietnam.

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