



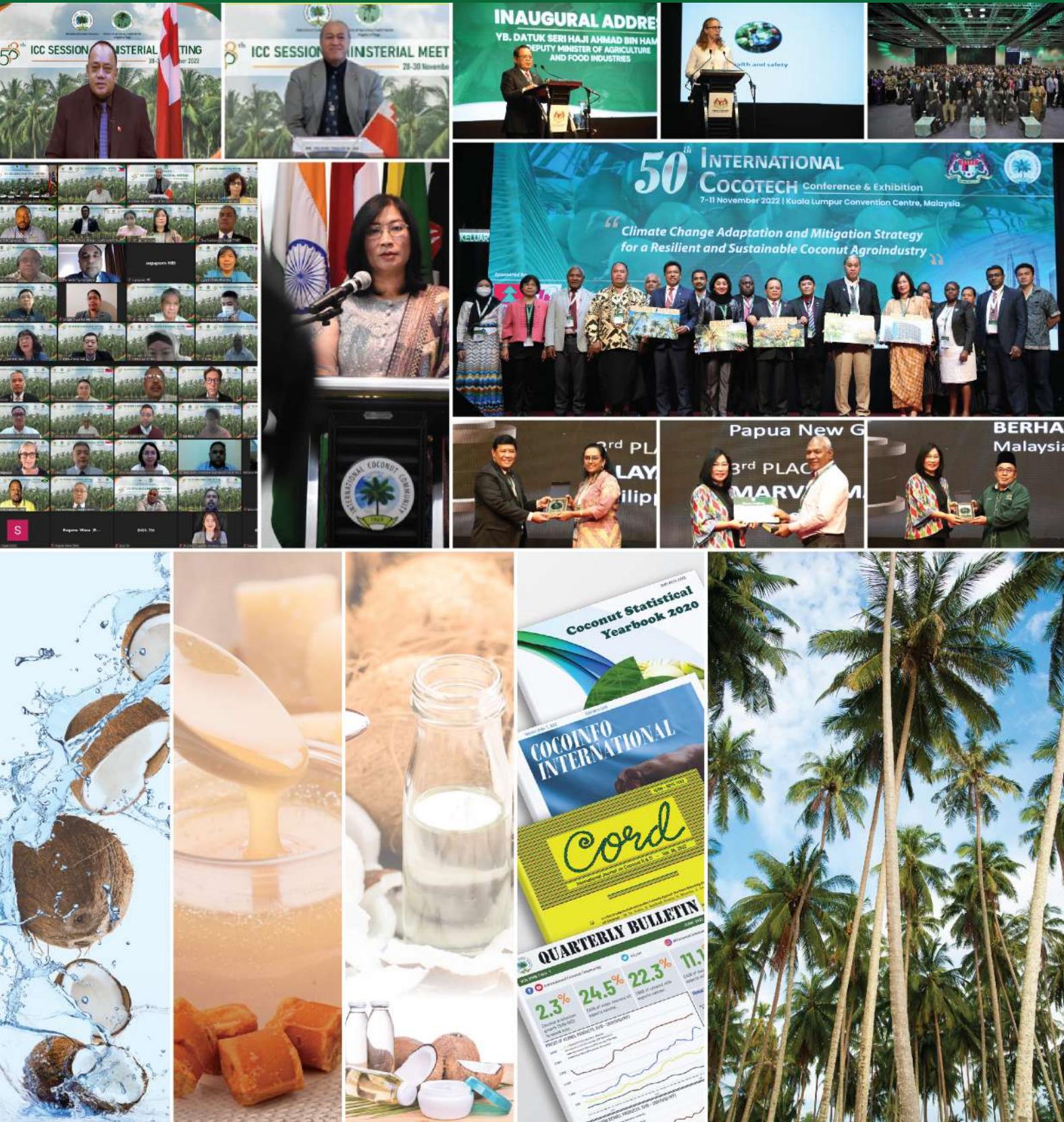
# The Cocommunity

Monthly Newsletter of the International Coconut Community

Vol. LIII No. 12

ISSN 0215 - 1502

December 2023



International Coconut Community



@CoconutCommunity

# COMPLETE ENGINEERING, DESIGN, MANUFACTURING, & INSTALLATION OF PLANTS FOR THE COCONUT INDUSTRY



[www.coconutmachineryindia.com](http://www.coconutmachineryindia.com)  
marketing@tiglobal.com

Complete  
Processing  
Lines



Combination Dryer for DC, VCO, Chips & Flakes



Apron type Band Dryer



Virgin  
Coconut Oil  
Expellor



Filter Press



Vacuum  
Dehydrator



Oil Storage  
Tank



Deshelling  
Machine



Milk  
Extractor



Scan for  
more information

Single Point Solution for Coconut Processing • Turnkey Processing Solutions

100+ Installations Worldwide • 50+ Years of Experience • ISO 9001 :2015 Certified

**Think Coconut. Think T & I Global.**

## TABLE OF CONTENTS

The Executive Director Speaks	
<i>"Transforming Coconut Farming for Sustainable Livelihoods"</i> .....	2
Prevailing Market Prices of Selected Coconut Products and Oils .....	3-4
Market Review of Activated Carbon .....	5-6
Community News .....	7-20
Trade News .....	20-23
Other Vegeoil News .....	23-24
Health News .....	24-26
Coconut Recipe .....	26
Statistics .....	28-29

## TABLE LIST

Table 1. Monthly Export of Coconut Shell Charcoal by Selected Countries 2021 - 2023 (In MT)	28
Table 2. Monthly Export of Activated Carbon by Selected Countries 2021 - 2023 (In MT)	28
Table 3. Export Destination of Activated Carbon from India and Indonesia, January-September 2023	29
Table 4. US Imports of Coconut Shell Charcoal based Activated Carbon, 2021-2023	29

## THE EXECUTIVE DIRECTOR SPEAKS

### *"Transforming Coconut Farming for Sustainable Livelihoods"*



Coconut, as a perennial crop, ensures a consistent yield over an extended period, reducing the need for annual planting. This guarantees a reliable and sustainable supply of food and non-food resources, leading to cost savings and a diminished environmental impact. Integral to numerous global agricultural economies, coconut farming significantly contributes to the economy, society, culture, and the environment. However, the sector in several regions still faces various challenges, including low productivity, monoculture practices, insufficient infrastructure, unavailability of efficient harvesting technology, low involvement of youth, lack of bargaining power, lengthy supply chains, and vulnerability to price fluctuations.

Comprehensive strategies are crucial to enhance the livelihoods of coconut farmers. This involves promoting climate-resilient farming practices, embracing polyculture systems, improving infrastructure, introducing efficient harvesting technology, youth involvement programs, transitioning from small-scale individual ownership to professional farmer groups, shortening supply chains, value addition and market linkages. Implementing best agricultural practices, including palm rejuvenation, efficient and globally accepted fertilization standards, and quality control measures, ensures globally accepted, high-quality coconut products.

As awareness of climate change and sustainable farming practices continues to increase among consumers, there is a potential for a rise in local and global market demand for products produced through climate-resilient methods. To meet this demand, collaborative supports are essential, involving supports for research to develop high yielding and drought- and pest/disease-resistant varieties, as well as the provision of extension service to transfer knowledge and innovations among farmers.

Designing a successful polyculture planting system in a coconut plantation involves critical requirements. These include determining the optimal coconut planting distance, implementing effective pest and disease management plans, carefully selecting compatible intercrops, and conducting market analyses to identify crops with high demand and market potential. To ensure ongoing success, regular assessments will be essential, allowing for the identification of adjustments needed to achieve optimal results in this diversified planting approach.

Addressing the lack of essential infrastructure, such as roads and ships, is crucial to ensuring smooth transportation of coconuts to processing units. It is crucial to advocate for government supports in developing essential infrastructure such as roads and irrigation systems for enhancing overall sector efficiency and fostering sustainable growth. Collaboration with coconut industries is key to establishing hubs for easy access, facilitating favourable prices for farmers. Simultaneously, a comprehensive youth engagement program, encompassing vocational training, entrepreneurship workshops, and mentorship initiatives, seeks to empower the younger generation for active participation and contribution to the coconut industry.

Shifting from individual ownership to establishing professional farmer groups is vital for pooling resources, sharing knowledge, and enhancing bargaining power. The encouragement of cooperative farming models further emphasizes collective decision-making and resource optimization, as exemplified by successful systems in countries like India.

While these strategies are not novel, their implementation may differ among countries. The most important point lies in a sustainable commitment by key players to revolutionize the current situation of coconut farmers, fostering sustainable livelihoods, environmental stewardship, and enhanced global competitiveness. As we conclude the year 2023, let us aspire for increased collaborative efforts from governments, agricultural organizations, local communities, and coconut industries. Such collaboration is essential for the successful implementation of these transformative measures.

A handwritten signature in black ink, appearing to read "DR. JELFINA C. ALOW".

DR. JELFINA C. ALOW  
Executive Director

## PREVAILING MARKET PRICES OF SELECTED COCONUT PRODUCTS AND OILS

**November 2023 witnessed significant shifts in the prices of various coconut-related products in major producing nations such as the Philippines, Indonesia, India, and Sri Lanka. Price of Coconut Oil (CNO) increased in Philippines, Indonesia, India, and Sri Lanka. Moreover, price of Desiccated Coconut (DC) increased in Indonesia and Sri Lanka but remained unchanged in Philippines.**

**COPRA:** Indonesia's Copra prices experienced a modest uptick, reaching US\$615/MT in November 2023 from US\$595/MT in the previous month. Impressively, this reflected a substantial year-over-year increase of US\$68/MT. In the Philippines, the domestic Copra market saw a moderate rise from US\$599/MT in October 2023 to US\$618/MT in November 2023, though it remained US\$34/MT lower than the corresponding period last year, when it stood at US\$652/MT.

**COCONUT OIL:** Coconut Oil prices displayed a synchronized upward trend in the Philippines, Indonesia, India, and Sri Lanka during November 2023. In Europe (C.I.F. Rotterdam), the average price surged to US\$1,118/MT, representing a 4% decrease from the preceding year. In the Philippines, the local market witnessed a settlement at US\$1,114/MT, marking a US\$69 reduction from the previous year. Indonesia experienced a surge, with the local price climbing to US\$1,113/MT in November 2023 from US\$1,071/MT in October 2023, indicating a noteworthy US\$42/MT increase compared to November 2022.

**COPRA MEAL:** A nuanced picture emerges when examining Copra Meal prices. In the

Philippines, the average domestic Copra Meal price was quoted at US\$248/MT in November 2023, a slight dip from the previous month. Impressively, this price was US\$53/MT lower than the same period last year. On the other hand, Indonesia observed an increase in the average domestic Copra Meal price, reaching US\$250/MT in November 2023. Despite this increase, it marked a US\$37/MT decrease from the previous year.

**DESICCATED COCONUT:** The average price of DC FOB USA remained unchanged at US\$1,690/MT in November 2023, marking a US\$267/MT decrease from the previous year. Sri Lanka reported an increase in the domestic price of Desiccated Coconut to US\$1,788/MT, while the Philippines' DC price in the domestic market remained stable at US\$2,039/MT. Indonesia's FOB price for DC rose to US\$1,575/MT, surpassing both the previous month's and the previous year's figures of US\$1,275/MT.

**COCONUT SHELL CHARCOAL:** In the Philippines, the average price of Coconut Shell Charcoal in November 2023 was US\$354/MT, slightly higher than the previous month. Indonesia's charcoal price experienced a slight increase to US\$448/MT in November 2023, while Sri Lanka observed a marginal decrease to US\$309/MT.

**COIR FIBRE:** In Sri Lanka, Coir Fiber was traded domestically at an average price of US\$57/MT for mix fiber and US\$401-US\$620/MT for bristle. In Indonesia, the price for mixed raw fiber remained unchanged at US\$110/MT in November 2023, slightly higher than the price a year earlier at US\$90/MT.

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

Products/Country	2023	2023	2022	2023
	Nov	Oct	Nov (Annual Ave.)	
<b>Dehusked Coconut</b>				
Philippines (Domestic)	125	123	132	129
Indonesia (Domestic, Industry Use)	182	161	129	151
Sri Lanka (Domestic, Industry Use)	232	208	178	218
India (Domestic Kerala)	402	394	400	405
<b>Copra</b>				
Philippines (Dom. Manila)	618	599	652	623
Indonesia (Dom. Java)	615	595	547	601
Sri Lanka (Dom. Colombo)	1,012	956	927	1,104
India (Dom. Kochi)	1,119	1,060	1,055	1,034
<b>Coconut Oil</b>				
Philippines/Indonesia (CIF Rott.)	1,118	1,058	1,167	1,072
Philippines (Domestic)	1,114	1,077	1,183	1,110
Indonesia (Domestic)	1,113	1,071	1,072	1,088
Sri Lanka (Domestic)	1,743	1,731	1,713	1,978
India (Domestic, Kerala)	1,752	1,664	1,716	1,673
<b>Desiccated Coconut</b>				
Philippines FOB (US), Seller	1,690	1,690	1,957	1,770
Philippines (Domestic)	2,039	2,039	2,039	2,039
Sri Lanka (Domestic)	1,788	1,619	1,435	1,631
Indonesia (FOB)	1,575	1,475	1,275	1,448
India (Domestic)	1,715	1,637	1,444	1,480
<b>Copra Meal Exp. Pel.</b>				
Philippines (Domestic)	248	247	301	275
Sri Lanka (Domestic)	284	282	257	293
Indonesia (Domestic)	250	249	287	274
<b>Coconut Shell Charcoal</b>				
Philippines (Domestic), Buyer	354	335	373	351
Sri Lanka (Domestic)	309	313	355	352
Indonesia (Domestic Java), Buyer	448	443	447	461
India (Domestic)	334	336	398	353
<b>Coir Fibre</b>				
Sri Lanka (Mattress/Short Fibre)	57	57	39	49
Sri Lanka (Bristle 1 tie)	401	470	387	412
Sri Lanka (Bristle 2 tie)	620	619	488	550
Indonesia (Mixed Raw Fibre)	110	110	90	94
<b>Other Oil</b>				
Palm Kernel Oil Mal/Indo (CIF Rott.)	968	912	1,062	993
Palm Oil Crude, Mal/Indo (CIF Rott.)	830	804	946	893
Soybean Oil (Europe FOB Ex Mill)	1,118	1,134	1,652	1,124

### Exchange Rate

Nov 30, '23

1 US\$ = P55.48 or Rp15,539 or India Rs83.38 or SL Rs328.16

1 Euro = US\$1.09 n.q. = no quote

## MARKET REVIEW OF ACTIVATED CARBON

The global activated carbon market is poised for a slowdown in 2023 amid heightened economic instability on a global scale. Specifically, the United States, the largest importer of coconut shell-based activated carbon, experienced a substantial 29.4% reduction in imports during January-November 2023. This decline is noteworthy given the impressive 45% increase in U.S. import volume of activated carbon, reaching 66,470 tons in 2022. The decreased import activity is primarily attributed to the prevailing economic slowdown in the country.

Contrastingly, Japan saw a 2% increase in activated carbon imports during the January-September 2023 period compared to the corresponding period in 2022. This growth follows the upward trend in 2022, which recorded an import volume of 86,191 tons of activated carbon, marking a 2% increase and valued at US\$168.17 million. This surge is linked to heightened usage in water treatment and air purification, as well as the expanding food and beverage processing industry.

On the supply side, India, a prominent activated carbon producer, shipped 118,244 tons to the global market during the January-October 2023 period, reflecting a 10.2% reduction in export volume compared to the corresponding period in the previous year. This is noteworthy considering India's positive growth in export volume during 2019-2022, with an average growth rate of 15%. India exported activated carbon to 155 nations worldwide in the first half of 2023, with the United States maintaining its position as the primary importer.

**Figure 1. Exports of Activated Carbon from India, January/October 2019-2023**

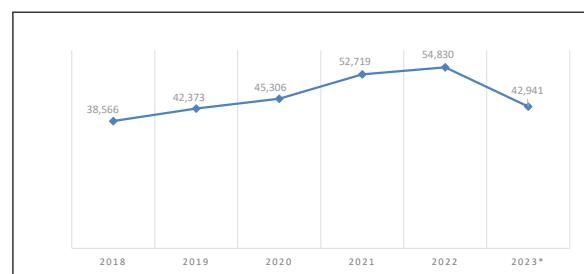


Source: Ministry of Commerce and Industry, India

Sri Lanka, another significant producer of coconut shell-based activated carbon, faced a negative trend in 2023. The export volume of coconut shell charcoal-based activated carbon from Sri Lanka declined by 5% to 42,941 tons during January-October 2023, generating export earnings of USD 102.9 million, a 23.5% decrease from the same period in 2022. Despite enjoying an increasing trend in export volume during 2018-2022 with a CAGR of 9.2%, key importers of Sri Lankan activated carbon, including the United States, China, Japan, Germany, and the United Kingdom, experienced reduced demand.

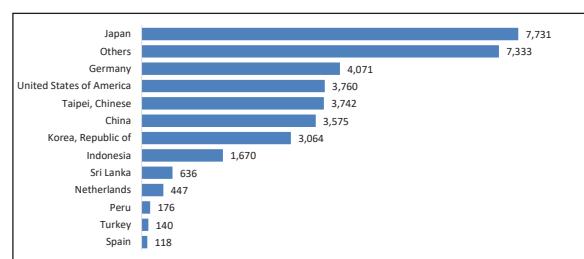
The Philippines also observed a reduction in activated carbon exports, with shipments totaling 36,463 tons in the January-July 2023 period, down from 48,707 tons in the corresponding period of 2022. Key importers of Philippine activated carbon included Japan, Germany, the United States, South Korea, and China. This decline in exports can be primarily attributed to diminished demand in importing countries resulting from an economic slowdown.

**Figure 2. Export of Coconut Shell Charcoal based Activated Carbon from Sri Lanka, Jan 2018-Oct 2023 (MT)**



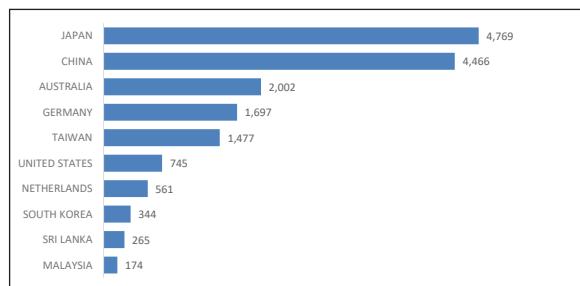
Source: Coconut Development Authority, Sri Lanka

**Figure 3. Export Destinations of Activated Carbon from Philippines, January-July 2023 (MT)**



Source: UCAP

**Figure 4. Top 10 Export Destinations of Activated Carbon from Indonesia, January–November 2023 (MT)**

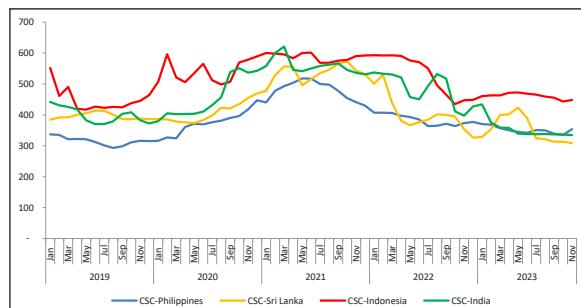


Source: BPS-Statistics Indonesia

Indonesia, another notable producer of coconut shell-based activated carbon, displayed a declining trend during the January–November 2023 period, with an 8% decrease in activated carbon exports compared to the preceding year. Indonesia exported 17,093 tons of coconut shell charcoal-based activated carbon during this period, garnering export earnings of US\$26.1 million. Major export destinations for the carbon from Indonesia were Japan, China, Australia, Germany, and Taiwan.

Against the backdrop of diminished demand for activated carbon, the price of coconut shell charcoal, the primary raw material for carbon production, experienced a downward trajectory across various producing nations. Over the period from January to November 2023, the price exhibited a downward trend in the Philippines, Sri Lanka, and India, while remaining relatively stable in Indonesia. Average prices for charcoal during January–November 2023 ranged from

**Figure 5. Price of Coconut Shell Charcoal US\$/MT (FOB) in the Philippines, Sri Lanka, Indonesia, and India January 2019 – November 2023**

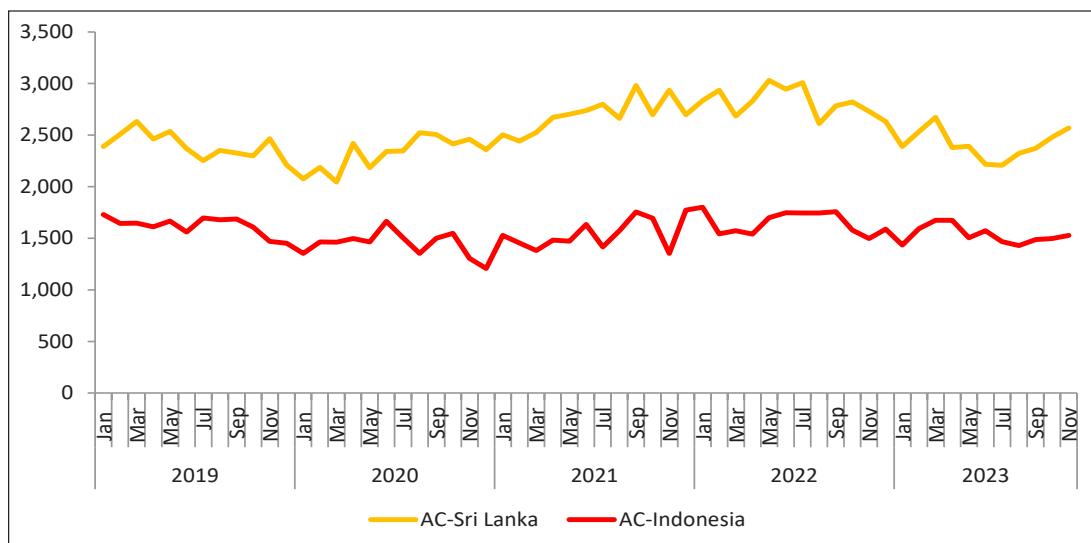


Source: ICC database

US\$351/MT to US\$461/MT, highlighting the diversity of this market commodity.

Conversely, the export price of activated carbon demonstrated fluctuating patterns in 2023. For instance, in Indonesia, the price escalated from US\$1,433/MT in January 2023 to US\$1,675/MT in April 2023, only to decrease to US\$1,468/MT by July 2023 and gradually increase to reach US\$1,527/MT in November 2023. Similarly, the price of activated carbon in Sri Lanka saw a fluctuated trend from US\$2,391/MT in January 2023 to US\$2,671/MT in March 2023 but then decreased to US\$2,208/MT in July 2023. The price gradually went up to reach US\$2,570/MT in November 2023. These price fluctuations can be attributed to a range of factors, including shifts in demand and supply, production costs, and global economic conditions.

**Figure 6. Export Price of Activated Carbon US\$/MT in Sri Lanka and Indonesia, January 2019 – November 2023**



Source: CDA, Sri Lanka and BPS Statistics Indonesia

## COMMUNITY NEWS

*On behalf of the editorial team, we apologize for several mistakes and inaccuracies in Cocommunity November 2023 with title: "Jacobi Is Working On Sustainable Activated Carbon Production Technology Based On Coconuts".*

### ILOCOS TOWN HOSTS COCONUT PROCESSING FACILITY

Bright prospects are expected for coconut farmers and artisans in the coastal town of Pagudpud, Ilocos Norte with the establishment of a coconut processing facility here.

Engineer Rose Anne Cabaloan, head of the Philippine Coconut Authority in Ilocos Norte, told journalists Thursday that the facility will be formally awarded to the Del Mar Shellcraft Multipurpose Cooperative, in a ceremony at the Ilocos Norte Agriculture and Fisheries Extension Center here.

Cabaloan said the facility will host several machines and equipment that will process products like cooking oil and all-natural virgin coconut oil.

Aside from oil, the Pagudpud cooperative is also actively engaged in the production, processing and marketing of household essentials and novelty items from coconut like mugs, coco kubyertos (utensils), coco bowls and coco peat.

"The establishment of the processing center will enable the coconut farmers to access new markets and improve their livelihood," she said.

In a separate interview, Pagudpud town mayor Rafael Ralph Benemerito said he is beyond grateful for the realization of the project since this has been a long-time dream of his constituents to revitalize the coconut industry.

"The facility will surely benefit our farmers and it will further inspire our craft makers to make good of what they have started," he said.

The PCA has partnered with the Small Coconut Farmers Organization in Pagudpud for the development of a 50-hectare coconut hybrid plantation to ensure sufficient supply of coconut for processing in the future.

The hybrid coconut could yield up to 300 nuts per year by augmenting hybrid technology with good agricultural practices.

A nursery is in place in Barangay Caparispisan where coconut farmers get their seedlings to be planted in the different villages.

Demand for coconut products has been attributed to the versatile nature of the plant, dubbed the "tree of life", since every part, from roots to tip, has practical uses. (Philippine News Agency)

### ADDRESSING UNSUSTAINABLE PRACTICES IN THE COCONUT SUPPLY CHAIN: 'FARMERS ARE TRAPPED IN A VICIOUS CYCLE OF POVERTY'

Coconuts grow in tropical climates, with more than 70% of global coconut oil production coming out of the Philippines and Indonesia. But unlike other foods grown in the tropics such as palm oil, coffee and cocoa, coconut trees are not associated with the same level of deforestation.

That is not to say that coconut production is free from unsustainable practices. Coconut plantations have been linked to biodiversity loss, and according to Gregory Bardies, executive director of the Sustainable Coconut Partnership, farmers are 'trapped in a vicious cycle of poverty'.

The recently launched Partnership is on a mission to wipe out unsustainable practices in coconut production by establishing

best practices, impact programmes, and harmonising industry requirements for supply chain partners.

### ***An industry-led partnership for social and environmental sustainability***

The Partnership was founded by food and beverage majors ranging from Barry Callebaut to Nestlé, Unilever, Ferrero, AAK and Upfield. Affiliate members include NGOs Earthworm Foundation, Kaleka and Proforest, as well as traceability tech company Satelligence.

Although the Partnership officially launched this year, the initiative was first discussed back in 2019 while Bardies was working in sustainability at Barry Callebaut. Beginning to investigate sustainable practices in coconut production, Bardies noted there was 'very little' public information about other companies' methods. "There was also very little sustainable certified product," he told.

Conducting due diligence exercises revealed signs of an 'impending crisis' in coconut supply chains, particularly in social sustainability. Most coconut farmers are smallholders, and at an advanced age. The next generation wants to move off the farm for a perceived easier life, explained Bardies. "Because farmers are not rejuvenating their farms, they're trapped in a vicious cycle of poverty. They're amongst the poorest farmers, especially in Asia."

And it's not just about social sustainability. Potential environmental sustainability risks also exist, with research suggesting coconut production poses a threat to biodiversity, particularly to vertebrates, arthropods, molluscs, and plants. "Potential environmental risks are much, much less than for some of the other supply chains like palm oil. But nevertheless, they are things to consider and monitor.

"It's absolutely worthwhile and valuable for the sustainability of the industry and

the wellbeing of millions of people in the environment to advance on sustainability. That's how it started."

The Sustainable Coconut Partnership became a formal entity in 2021, with the platform officially launching earlier this year.

### ***Deforestation: Why is there less in coconut than palm oil?***

So why, if produced in a similar tropical climate to other foods linked to deforestation such as palm oil, cocoa and coffee, is associated deforestation significantly less for coconuts?

One reason coconut production is considered more sustainable lies in its farming structure, whereby the vast majority (up to 98%) is smallholder driven. Smallholder coconut farmers own between two and four hectares of land, meaning their approach to farming is less intensive and industrialised compared to some other supply chains, Bardies told this publication.

Another reason more directly linked to deforestation is that coconut trees are considered more productive over an extended period, suggested the executive director. Oil palms are productive for around 25 years, whereas coconut trees can be productive for more than 60 years, we were told.

"In palm oil...there is a constant need for more, more, more. In coconut, there is much less of this."

That is not to say that demand for coconut is not growing, it is. Production is 'barely keeping pace', stressed Bardies. And not just for the food industry: coconut is used to produce soap, laundry detergent and cosmetics, as well as biodiesel. Coconut by-products – notably the husk – can also be used in other projects, for example to produce charcoal or construction materials.

Bardies does not see greater biodiversity risk in coconut cultivation compared to other

crops, and actually sees opportunity for more sustainable practices given cultivation practices. "In coconut production you can spread out the trees and grow forestry much more easily than in other supply chains.

"[As to] biodiversity, we cannot say there is zero risk. We are quantifying a number of those risks, but the common understanding is that [unsustainable nature of coconut production is mostly linked to] farmer poverty and social issues."

### ***Partnership upgrades charter with assurance scheme***

In improving the sustainability of coconut production, the Partnership has set out three main impact areas: increasing smallholder farmers' income; enhancing supply chain traceability; and preventing deforestation & climate change.

In 2020, the Partnership received more than 100 inputs from various stakeholders engaged directly or indirectly in coconut supply chains to develop an industry-wide Sustainable Coconut Charter. The ambition was to set a global benchmark for sustainable coconut origins.

The first charter set out principles and ambitions for sustainability programmes, explained Bardies. "It was a guidance for sustainability programmes. We were seeing that a number of sustainability programmes in coconut were targeting a little bit of traceability, maybe a little bit of environment, but not comprehensively addressing all the pain points and issues in the supply chain." While the first charter sought to change that, it offered guidance only.

Upon realising there remained 'holes in the racket', the charter has been revised to be 'much more comprehensive'. Unveiled this year, the charter now includes an assurance scheme.

"We are also looking at creating market transformation, which the first charter didn't

allow," explained Bardies. Looking to supply chains, for example, the charter not only offers guidance for companies to act on the ground, but also for ways to act as a 'responsible company' to create enabling conditions for change.

Through these new principles and ambitions – covering guidance, chain of custody, traceability, reporting, and implementation – the Partnership aims to build out a new assurance system, which Bardies described as a 'stepwise approach to existing certification schemes that aren't showing any signs of picking up in the market'.

The decision came from consultations with stakeholders: 75% of those offering input consider it crucial the charter have a new, coconut specific assurance system.

The Partnership's assurance system is designed to be more 'inclusive' than others on the market, which include certification, to encourage as many industry players to join as possible. The assurance system is designed to publicly recognise Members' progress in sustainability.

As to whether the assurance system could also lead to eco-labelling opportunities to help better promote companies' work in sustainability, the jury is still out. When coconut often makes up less than 5% of a finished food product, it will have to be decided whether communicating that it was responsibly sourced, on-pack, is worthwhile. (*FoodNavigator*)

### ***NEW COCONUT TRIANGLE FOR HAMBANTOTA***

The Coconut Development Board has decided to establish a new coconut triangle by planting 100,000 coconut saplings in Hambantota district.

Accordingly, the establishment of this new coconut triangle centred on the areas of Ranna, Weeraketiya and Walasmulla is currently being carried out. Accordingly, arrangements have been made to provide five coconut saplings per

household to the farmers for planting coconut saplings in their home gardens.

The distribution of coconut saplings to the farmers for this new coconut triangle was done recently with the participation of Agriculture and Plantation Industries Minister Mahinda Amaraweera.

Although coconut cultivation in Sri Lanka is planted as a plantation crop, so far 75 percent of the total coconut production is used for local consumption. Although it is a plantation crop with a high demand for export, coconut production in this country has not yet been developed to the point of export.

Although the total daily consumption of coconuts is around 4.5 million nuts, the daily production of coconuts is around three million nuts. For this reason, the Minister has instructed the National Coconut Development Board to implement a programme to motivate the people to cultivate coconut cultivation in every home garden that has space.

A large amount of coconut that can be used in the consumption of our country is destroyed due to ignorance. For this reason, the Minister also instructed the Board to prepare practical programmes to inform the public about how to get the maximum benefit from a coconut.

Steps have been taken to provide coconut saplings to the farmers of those seven villages in relation to the Youth Agri Entrepreneurship Village Programme currently operating in seven villages of Hambantota district. (*Daily News*)

#### **THE DEPARTMENT OF AGRICULTURE EYES UPSCALING OF COCONUT INDUSTRY AMID DECLINING YIELD**

The Department of Agriculture (DA) is looking to upscale the coconut industry to boost the production of the sector, which covers over a third of the country's agricultural exports amid declining yield.

Figures from the DA show the Philippines is the second largest coconut producer in the world behind Indonesia, but it is the top exporter as it ships 70% of its output overseas. According to the Philippine Coconut Authority (PCA), the industry's export value in 2022 was \$3.2 billion.

"The Philippines needs to embark on increasing productivity through the cultivation of quality planting materials like [coconut] hybrids and varieties with superior traits," Agriculture Secretary Francisco Tiu Laurel Jr. said.

Despite stable export growth, the DA said the coconut industry and farmers continued to suffer from declining farm yield since 2010 stemming from "infestation and major typhoons; low investments; limited research and development; and poor infrastructure."

The DA said around 3.5 million farmers cultivate 3.6 million hectares of coconut plantations across the nation. Of the country's 82 provinces, 68 produce the commodity.

President Ferdinand Marcos Jr. in October ordered the PCA to craft a solid plan to boost the industry's productivity amid the government's target to plant 100 million coconut trees by 2028. (*CNN Philippines*)

#### **CUBAN FAMILY BUSINESS PRODUCES FLOUR FROM COCONUT AND YUCCA AMID SHORTAGES**

On a small farm outside Havana, a Cuban family-run business produces gluten-free flour from banana, coconut and yucca, preferring locally-sourced ingredients to pricey imports as Cubans seek innovative solutions to a growing food crisis.

Cuba purchases most of the food it consumes from abroad, but revenues have plunged following the coronavirus pandemic, hampered by stiff U.S. sanctions and floundering tourism, once a mainstay of the Caribbean island economy.

That has led some, such as 38-year old entrepreneur Gabriel Perez, to look for alternatives.

"There is a crisis, that is undeniable," said Perez, who recently sold a home and business to settle on farmland in the rural outskirts of Havana. "But in Cuba it stems in part from a lack of culture around eating the foods that we have at hand."

He points to Cubans' preference for rice, pork and beans, all locally available but many of which require machinery and agricultural inputs to grow at scale.

His business, Bacoretto, dries and mills yucca, rice, banana and coconut into organic flour preferred by gluten-intolerant consumers, who have only recently been able to find food products tailored to their dietary needs in Cuba.

Byproducts of their processes are used to make coconut oil, coconut-fiber rope, vinegar and fermented products and sweets, Perez said.

Bacoretto is small and specialized, and its products available primarily in Havana. It produces 6 to 8 kilograms (13.2 to 17.6 pounds) of flour a week, Perez said, in small batches, in addition to byproducts, with a staff of eight people.

Perez said the business, which took advantage of a 2021 decision to lift a ban on private companies in place on the island since shortly after Fidel Castro's 1959 revolution, has struggled to find the financing it needs in cash-strapped Cuba.

Thousands of small businesses have taken root in Cuba since 2021, but many face persistent problems with financing, infrastructure, supply and workforce in the communist-run country which for decades shunned private enterprise.

"To be profitable," Perez said, "technological capacity needs to be increased and better machinery is needed." (Reuters)

## **SOUTH CANARA COCONUT FARMERS' PRODUCER COMPANY LTD. TO RELEASE BIO-FERTILISER MADE FROM COCONUT WATER AND OTHER PRODUCTS**

A bio-fertiliser made from coconut water and other ingredients and a plant immunity booster made from coconut tree petiole are among the four new products to be released by South Canara Coconut Farmers' Producer Company Ltd. (FPC), Puttur, at a function in Mangaluru.

The other two products will be chutney powder made from copra and coconut oil.

The president and managing director of the FPC S.K. Kusumadhar said that the products will be released at the inauguration of the Regional Office of the FPC near Maroli Suryanarayana Temple in the city. The Regional Office will also serve as the 11<sup>th</sup> branch of the FPC.

He said that the FPC has already released the pickle made from coconut in the market. In addition, it has released entomopathogenic nematode, a bio-liquid for controlling root and white grubs. The FPC also produced vermicompost made from coconut fiber and compost manufactured from coconut fiber.

The Chief Executive Officer (CEO) of the FPC A. Chethan said that about 10 month to 11 month old coconut is used to make pickle which can be preserved up to six months. The plant immunity booster to be released can be applied to any plant.

The CEO said that the FPC now has a coconut processing unit at Doddathota, near Sullia, which produced eight tons of copra a day by purchasing coconut from its farmer members. The company established on August 5, 2021 has 14,403 members having more than 15,000 coconut trees spread over 332 plus villages. It has plans to open its branch in each taluk.

He said that the FPC is in the process of opening its 'kalpa rasa' (or neera) unit. When it is operational, a grower can earn ₹2 lakh per annum from eight coconut trees.

The CEO said that the FPC has opened a toll free number 180 02030129 to provide information to coconut growers on coconut related matters. The growers can use Tulu language too get the information.

He said that it has provided training to more than 120 women in preparing handicraft products from coconut shells. It has linked coconut farmers with 480 trained coconut harvesters (or coconut tree climbers) who have been arranged with ₹5 lakh health insurance each. (*The Hindu*)

#### **CPCRI DEVELOPING GERMPLASMS OF COCONUT HAVING UNIQUE CHARACTERISTICS, SAYS DIRECTOR**

Director of the Central Plantation Crops Research Institute (CPCRI), Kasaragod, Kerala, K.B. Hebbar said, that the institute is developing germplasms of coconut having unique characteristics.

Speaking at a function organised by the South Canara Coconut Farmers' Producer Company Ltd. (FPC), Puttur to open its regional office in Mangaluru, Mr. Hebbar said that among the germplasms being developed includes coconut having soft kernel.

The water of some coconut varieties has a special kind of aroma. While some are known for their flavour. The institute, under the Indian Council of Agricultural Research (ICAR), is developing their germplasms to promote their cultivation. The germplasms will be developed over the next five years.

Mr. Hebbar said that the CPCRI will also develop a dwarf variety suitable for tapping 'neera' (a sweet sap extracted from coconut palm). It has already produced sugar and jaggery from neera.

The Director said that the institute is also developing a standard operating procedure (SOP) for coconut pest control and application of micro nutrients to coconut palms.

#### **Carbon credit**

Asking arecanut and coconut growers not to lose hope, the Director said that a day will come when the growers can participate in the carbon credit trading and receive income.

The carbon credit trading is already in vogue in the United States and European Union but is yet to be implemented in India. When the carbon credit scheme is a reality in India, the arecanut and coconut plantations will be in demand.

On the backdrop of carbon credit trading getting importance the Philippines has planned to plant coconut palms on one million hectares, Mr. Hebbar said.

A bio-fertiliser made from coconut water and other ingredients, a plant immunity booster made from coconut tree petiole, chutney powder made from copra, and coconut oil – which were four new products of the FPC were released on the occasion. The regional office of the company also served as the 11<sup>th</sup> branch of the company.

President and managing director of the FPC S.K. Kusumadhar, seer of Adichunchanagiri branch mutt, Kavoor Dharmapalanatha also spoke. (*The Hindu*)

#### **PCA EYES 3K HAS AS ADDITIONAL COCONUT PLANT SITES IN CL**

The Philippine Coconut Authority (PCA) is eyeing some 3,000 hectares of land in Central Luzon for additional coconut plantations to boost the production of farmers in the region.

During the recent 6<sup>th</sup> CARP Regional Trade Fair at Marquee Mall in Angeles City, the PCA said the new plantations will be set up in Bataan, Bulacan, Nueva Ecija and Zambales.

The project is funded under the Coconut Farmers and Industry Trust Fund by virtue of Republic Act 11524.

It has an allocation of P50 million in the 2024 budget of the agency, which will also allow coconut planters to access the 1972 collection from the Coconut Levy Fund.

An estimated 700,000 coconut trees will be planted in the identified areas, comprising the tall variety in 2,000 hectares in Zambales, and the dwarf variety in 1,000 hectares in Bataan.

In Bulacan, 50 hectares at the foot of Sierra Madre will also be planted with the high-yielding varieties.

The PCA added that nursery seedlings will also be set up in the coconut plantations, which is part of the agency's priority programs for 2024. (*SunStar*)

#### **DA EYES UPSCALING OF COCONUT INDUSTRY AMID DECLINING YIELD**

The Department of Agriculture (DA) is looking to upscale the coconut industry to boost the production of the sector, which covers over a third of the country's agricultural exports amid declining yield.

Figures from the DA show the Philippines is the second largest coconut producer in the world behind Indonesia, but it is the top exporter as it ships 70% of its output overseas. According to the Philippine Coconut Authority (PCA), the industry's export value in 2022 was \$3.2 billion.

"The Philippines needs to embark on increasing productivity through the cultivation of quality planting materials like [coconut] hybrids and varieties with superior traits," Agriculture Secretary Francisco Tiu Laurel Jr. said.

Despite stable export growth, the DA said the coconut industry and farmers continued to suffer from declining farm yield since 2010 stemming from "infestation and major typhoons; low investments; limited research and development; and poor infrastructure."

The DA said around 3.5 million farmers cultivate 3.6 million hectares of coconut plantations across the nation. Of the country's 82 provinces, 68 produce the commodity.

President Ferdinand Marcos Jr. in October ordered the PCA to craft a solid plan to boost the industry's productivity amid the government's target to plant 100 million coconut trees by 2028. (*CNN Philippines*)

#### **BARBADOS MISSING OUT ON BENEFITS OF COCONUT INDUSTRY**

An agriculture official is pleading with coconut vendors not to illegally dump shells which have significant value, while a university academic has suggested that Barbados is missing out on the benefits of an entire coconut industry.

Chief Agriculture Officer Keeley Holder pleaded with the roadside vendors on Friday as she said the shells could be used as organic matter to help crop farmers boost their production.

Speaking to the media on the sidelines of a symposium held at the 3Ws Pavilion at the University of the West Indies, Cave Hill Campus, entitled The Potential of the Coconut Industry and Sustainable Development, she said: "I think there's a fantastic opportunity, particularly for the farming industry. We talk about the circular economy and the key to the circular economy is reusing organic matter in the soil."

"I'm aware that the Sustainable Barbados Recycling Centre (SBRC) used to receive as much as about 4 400 tonnes of coconut shells on an annual basis. That is a significant amount of organic material there. You may be aware that they would produce an organic mulch made from coconut shells from the husk of coconut in particular and it would be mixed with wood chips because of how they process it. That mulch was fantastic for increasing organic activity in the soil and improving yields for farmers. So the more organic matter that we can get, all the

green waste that also goes to SBRC, having that as well as that coconut waste and being able to put it back in the soils, this is one way to help farmers improve their yields."

Holder said this helps with drainage issues as well.

"It is fantastic for improving the water-holding capabilities of the soil," she explained.

"With more organic matter in the soil, there's more water-holding capability, less runoff and that also means that in periods of drought, the soil doesn't dry as quickly.... It [the coconut shell] can be reused for the farmers to help continue improving their soil, which I call our black gold, and we need to be able to use that more effectively. So more composting and using these things to replenish the soil, I think that's where we really need to go."

Holder pleaded with the vendors to not dump the shells in gullies or bushy areas but to contribute to the recycling of the materials.

"We would want the coconut vendors to see the value in the shells and also play their part. [They] must recycle [the shells] in a way that helps to benefit the entire society," she said, advising vendors to take their shells to the SBRC for processing to help improve the environment and improve the farms. "I think that it is critical that they need to play their part, not just in the selling of the water, but helping us in our circular economy."

Holder added that it was important for regional and international agencies and the farming community to partner with the vendors to protect the coconut ecosystem. She said some level of training could be provided to help vendors as well as householders who have coconut trees on their properties, understand the true value of the shells.

During the symposium, Pro Vice-Chancellor and Principal of the university Professor Clive Landis also said there was much more to get from coconuts than just water and jelly.

"When we look around at the coconut vending on our highways... you would imagine this must inevitably be linked to a much larger coconut industry. Unfortunately, it is primarily coconut water which is sold, and at times coconut jelly, while much else goes to waste."

"I am sure that discarding thousands of coconut shells likely presents a challenge for our landfill management. It is certainly not what one would regard as a prime example of sustainability, let alone adherence to the mantra of reduce, reuse and recycle. But most critically, the country is losing out on a precious resource that with imagination and diversification can fuel an entire coconut industry for the benefit of sustainable development and the creation of good jobs," he said.

Permanent Secretary in the Ministry of Agriculture Terry Bascombe, who gave an address on behalf of Minister Indar Weir who was unable to attend the event, said the coconut industry has made a mark in the development of Barbados, adding that the tree was versatile and almost every part of it could be used.

He noted that the leaves were used to make baskets, hats, brooms and arts and crafts; the husk was used to make ropes, matting, mosquito repellent, and bio-fuel; while the shell was used for utensils, charcoal and as a planting medium. The trunk, he said, was used for building material and wood, while the coconut flesh was used for beverages, cream, flours, oils and cosmetics, and the tree roots were used for dyes and medication. (*Barbados Today*)

## OPPORTUNITY FOR VIETNAM'S COCONUT EXPORTS TO US, CHINA

Vietnamese coconut growers and businesses are excited to expand production to meet the domestic and foreign demand which is expected to increase in the coming time as the US officially opened its market for Vietnam's fresh coconut in August this year, and China is considering to allowing official coconut import.

Bui Duong Thuat, Director of the Mekong Fruit Export Ltd. Co in Chau Thanh district, the southern province of Ben Tre, said that the US market is the second-biggest coconut importer in the world, just after China as it imports approximately 2,000 containers of fresh coconut yearly.

Meanwhile, Vietnamese companies export between 110 and 120 containers of fresh coconuts to the US a year. Therefore, there remains room for Vietnamese coconut in the market.

Moreover, the General Administration of Customs of China is inspecting cultivation areas to endorse a protocol authorising the official import of Vietnamese fresh coconut to the market of over 1 billion people, Thuat said, hoping that Vietnam's fresh coconut will be exported to China soon.

To seize the opportunity, he said his company planned to cooperate with coconut farmers in Ben Tre province to develop a 100-ha organic material area.

Vo Van Hai, the Chairman of the Luong Hoa commune Farmers' Association in Ben Tre province's Giong Trom district, said that the commune is one of the most productive coconut-growing areas in Vietnam. Currently, there are more than 716 ha of coconut farming in the commune, with 300 ha grown to get coconut water.

On average, a tree yields between 140 and 150 coconuts per year, and coconut farmers can earn up to 100 million VND (4,200 USD) per hectare per year.

Ben Tre is known as Vietnam's coconut capital with a coconut growing area accounting for about 40% of the country's total and 46% of the total in the Mekong Delta region.

Huynh Quang Duc, Deputy Director of the provincial Department of Agriculture and Rural Development, said that Ben Tre has over 78,000

ha under coconut farming and produces over 800 million coconuts a year.

Regarding coconuts grown to get coconut water, the province cultivates nearly 16,000 ha with a yearly output of about 390 million coconuts. About half of the coconuts meet export requirements.

Ben Tre has five enterprises that export fresh coconuts to markets, including Japan, Singapore, Taiwan (China), Australia, and Canada. About 20 companies have registered to get packaging facility codes and planting area codes that enable them to export coconut to the Chinese market.

Besides, geographical indications have been granted to the province's coconut products. Therefore, the effective exploitation of the geographical indications adds an advantage for Ben Tre coconut to expand its markets. (*Vietnam Plus*)

## **ENVIRONMENTALISTS SOUND ALARM AFTER LIVE COCONUT RHINOCEROS LARVAE ARE FOUND ON MAUI**

The first live coconut rhinoceros larvae have been found on Maui as environmental advocates are sounding the alarm about spreading invasive pests.

They say the state has no power to stop it.

Behind the scenes, lawmakers and advocates are upset that proposed rules to quarantine infected plants aren't moving fast enough and complained the plant industry had stopped the process.

Lawmakers grilled state Department of Agriculture Director Sharon Hurd at a hearing as she announced the coconut rhinoceros larvae had been confirmed on Maui.

Some 17 destructive larvae were discovered Tuesday by an arborist who was cutting down

coconut palm trees in Kihei, she said. The site was near Lipoa Parkway along Ala Hula Street.

"Once they devastate the coconut trees, we have found them in fruit trees, papayas, ulu, bananas, that have cultural significance," Hurd said.

Lawmakers and community advocates are worried about spreading invasive pests.

State Sen. Chris Lee played phone recording from the Waimanalo neighborhood board chair of what sounded like a cacophony of critters.

"You can hear that. That's the sound of what is typical of the Big Island right now with a plethora of coqui, which unfortunately now are all over the place," said Lee.

Christy Martin, of the Coordinating Group on Alien Pest Species, says the cause of the spread is the live plant trade and nurseries.

She says the state has no laws to quarantine and stop the movement of infected plants.

"We don't have the tools in the toolbox to be able to do the sensible thing with regulations and instead all of those costs of all of those pests get passed on to us," said Martin.

"The (little fire) ants come in and they attack people in their beds at night," she added.

Hurd says the rulemaking process could have been faster, but she blames a lack of staff not will.

"Our intent at the department was not to delay the rule making process, but was to insert additional rules," said Hurd. "What we wanted to insert was a process from detection to quarantine."

The Department of Agriculture expects to have an interim rule for little fire ants to be ready in January, but Hurd says it could be a year before new permanent rules are implemented. (*Hawaii News Now*)

## 'HELLO NAARIYAL' CALL CENTRE LAUNCHED

The Coconut Development Board (CDB) has launched 'Hello Naariyal' Friends of Coconut Trees (FoCT) call centre facility to help farmers with coconut harvesting and plant management operations. C.F. Joseph, Advisor, Horticulture, launched 'Hello Naariyal' in the presence of Priya Ranjan, Joint Secretary (Mission for Integrated Development of Horticulture), Ministry of Agriculture and Farmers Welfare, and Prabhat Kumar, Horticulture Commissioner and Chief Executive Officer of CDB.

The 'Hello Naariyal' call centre in Kerala functions from the headquarters of the Board in Kochi, says a press release. The initiative will benefit coconut growers and extend its services to traditional coconut-growing States of Tamil Nadu, Andhra Pradesh and Karnataka through the respective unit offices of the Board.

There are 1,924 registered FoCTs for the call centre. The services will be available at block and grama panchayat levels in respective districts for carrying out activities related to coconut cultivation, including coconut tree climbing, plant protection, harvesting, seed nut procurement, and nursery management. (*The Hindu*)

## WORKSHOP HELD FOR OFFICERS ON COCONUT CULTIVATION

To promote integrated development of coconut cultivation and enhance its production in the state of Tripura, the Coconut Development Board organised a day long orientation programme at Nagicherra Horticulture Research Complex for the officers of agriculture and horticulture.

The Director of the North East regional unit of the Coconut Development Board Rajat Pal accompanied by the director of the state agriculture and farmers' welfare department Saradindu Das, Director of Horticulture and Soil Conservation department Dr. Phani

Bhusan Jamatia and others were present in the programme, where at least 30 officers from different parts of the state participated.

The orientation programme mainly focused on sensitizing the officers about the cultivation of coconut in the state of Tripura through scientific method and apprising them about the latest technologies for the cultivation, said Director Rajat Pal. He further informed that an area expansion programme was undertaken in Tripura covering 500 hectares of land for coconut cultivation. (*Tripura Times*)

### **338K COCONUT FARMERS IN CENTRAL VISAYAS URGED TO SIGN UP WITH NCFRS**

The Philippine Coconut Authority (PCA) is targeting 338,649 coconut farmers in the four Central Visayas provinces to sign up with the National Coconut Farmers Registry System (NCFRS) so they can avail government's funding for this sector.

PCA Region 7 (Central Visayas) Regional Director Brendan Trasmonte told the Philippine News Agency on Thursday that the farmers who were already identified and included in the updated list are from Bohol, 124,571; Negros Oriental, 104,400; Cebu, 92,059 and Siquijor, 17,619.

Trasmonte said of the total target, those that have already been encoded and registered in the NCFRS are Bohol, 87,801; Negros 75,787; Cebu 64,153; and Siquijor 10,848.

He urged the remaining coconut farmers to sign up with the NCFRS to avail of the different programs and assistance under Republic Act 11524 or The Coconut Farmers and Industry Trust Fund, previously known as the coco levy fund.

The Act requires the creation of the Coconut Farmers and Industry Development Plan (CFIDP), which has already been approved and is being implemented through various government agencies, he said.

"This is actually designed for coconut farmers to address their needs and concerns," he added.

The program components that registered coconut farmers could avail of include social protection, scholarships, crop insurance, training, hybridization, integrated processing of coconut-based products, organization of farmers' associations, and support services such as production loans and others.

The NCFRS will be the coconut farmers' ticket to avail of the different programs and services offered through the CFIDP as the list will be the government's official basis for assisting this sector, Trasmonte said.

According to the PCA regional director, even non-owner of lands planted to coconut can also register with the NCFRS, including those renting/tilling land from or even just being employed by a coconut farmer.

A coconut grower with a minimum of 20 coconut trees may also avail of certain government assistance and services provided that person is officially listed in the NCFRS, he said. (*Philippine News Agency*)

### **A MODEL VILLAGE FOR KING COCONUT EXPORT CULTIVATION NEXT YEAR**

The demand for Sri Lankan King Coconut in the international market is increasing rapidly. According to the Sri Lanka Coconut Development Authority, the export of King Coconut in Sri Lanka has increased by 117 percent in 2023.

Agriculture and Plantation Industry Minister Mahinda Amaraweera discussed with the officers of the Coconut Development Board, Sri Lanka Coconut Research Institute and Coconut Development Authority about the measures to be taken in the future for the development of coconut cultivation in Sri Lanka and the progress made so far.

Although it has not been cultivated as a plantation crop so far, there is a high demand in the international market for the king coconut grown in this country. In 2022, 11 million king coconuts were exported and an income of Rs.110 million was earned.

Also, the amount of king coconuts that have been exported so far this year is 14 million. The income earned from it is Rs.140 million.

Also, the amount of king coconuts exported this year has increased by 117 percent.

As a king coconut cultivation, it has not yet become popular in our country. Therefore, Minister Amaraweera instructed the officials of the Coconut Development Authority, Coconut Research Institute and Coconut Development Board to conduct a soil test and identify a suitable area for orange cultivation and name the area as a king coconut cultivation export model village.

At present, we have not identified a variety of king coconut suitable for cultivation in our country and the traditionally cultivated king coconut species are still being cultivated. But the Minister also instructed the Sri Lanka Coconut Research Institute to start research to introduce a new species of king coconut that has high taste and attractiveness and bears fruit in a short period.

State Minister Lohan Rathwathe also participated. (*Daily News*)

#### **FARMERS DIVIDED AS GOVT SHIFTS COCONUT CULTIVATION TO HORTICULTURE DEPARTMENT**

Tamil Nadu government has issued an order shifting schemes and various programmes of coconut plantations being implemented by the agriculture department to the horticulture department according to the GO, the administration of all 22 coconut nurseries, 16 coconut crossing centres and 20 coconut

parasite breeding centres will be handed over to the horticulture department.

Schemes implemented through Coconut Development Board with the help of state and union funds such as establishment of regional coconut nurseries, laying out of demonstration plots, replanting and rejuvenation, and crop insurance schemes will be governed by the horticulture department, the order says.

Coconut growers are divided whether the shifting will be a boon or a bane. Tamil Nadu Coconut Farmers Association said the initiative would help farmers and related workforce to scale up their income-generation through value addition as the Union government has various schemes with required funds. "In most states, coconut plantations are already under horticulture department. So, the state government's move will help coconut growers in several ways," said association general secretary P S Masilamani.

However, a section of coconut farmers appealed to the government to retain the crop under agriculture department. Nasuvini Riverbed Farmers Welfare Association president V Veerasenan said the agriculture department has the required number of field-level officials and staff to cater to their needs. "It is easy for farmers to consult them for technical advice like pest control and water management etc. Unlike agriculture department the horticulture department functions with limited staff," he said. "They provide immediate access to various schemes and benefits from Coconut Development Board. So, the continuation of coconut under agricultural department will benefit farmers," he said.

The GO said that non-technical staff numbering 123, and 39 agriculture officers and 49 assistant agriculture officers also will be transferred to the horticulture department. However, agriculture officers and assistant agriculture officers working at coconut nurseries, coconut crossing centres and coconut parasite breeding centres will be

shifted to vacant posts wherever available in the agriculture department. (*The Times of India*)

### **CRAFTING LEATHER FROM COCONUT WATER: THE MALAI BIOMATERIALS STORY**

Malai Biomaterials, co-founded by Susmith from Kerala and Zuzana from Slovakia, is an innovative venture that epitomises the future of sustainable material development. Their groundbreaking project transforms organic bacterial cellulose into Malai, a versatile material derived from agricultural waste of the coconut industry in Southern India. This development marks a significant advancement in eco-friendly material innovation.

Malai stands out for its sustainability and adaptability, successfully being used in fashion accessories. It emulates leather's texture and durability, offering a biodegradable and vegan alternative to conventional leather widely used in fashion. This innovation is a part of the founders' broader commitment to sustainability, incorporating natural fibers like banana stem, hemp, and sisal into Malai, fostering a circular economy through compostable materials.

Since 2018, Malai Biomaterials has been renowned for its ecological approach, addressing environmental and ethical concerns in various industries. Their use of coconut water to create a material comparable to leather in functionality and aesthetic appeal has set a new standard in sustainable solutions.

As a PETA-approved entity, Malai's notable feature is its quick decomposition, breaking down within 90-150 days. This attribute highlights the multifaceted benefits of coconut, well-known for its healing and nutritional properties. Malai Biomaterials has ingeniously tapped into coconut water's potential to create an eco-friendly leather substitute.

The material is produced through a fermentation process involving waste coconut and other natural

resources, resulting in a biodegradable, vegan product. This initiative reflects the founders' passion for sustainable fashion and environmental care, culminating in a product development phase funded by personal savings and conducted in a collaborative manufacturing unit in Karnataka.

The manufacturing process of Malai involves collecting and sterilising coconut water from Kerala farms. The cellulose produced is mixed with banana fiber or gum, forming sheets or 3D shapes. These are then treated with natural dyes and water-resistant coatings, offering various textures and hues.

Despite challenges like the COVID-19 pandemic, Malai Biomaterials aims to expand into the Indian market, exploring new applications in furniture and interior design. With a monthly production capacity of 200 square meters, the company is poised to make a significant impact in sustainable material development.

Malai Biomaterials represents a paradigm shift in material innovation, blending traditional resources with modern research to offer eco-friendly alternatives. Their commitment to environmental and ethical manufacturing sets a precedent in the industry, heralding a future where sustainable choices are not only viable but also preferred. (*Your Story*)

### **PREDATORY MITE TO CONTROL COCONUT MITE DISEASE INTRODUCED**

A predatory mite (*Neoseiulus Barak*) has been introduced by the Coconut Research Institute in Lunuwila to control the spread of the coconut mite (*Aceria guerreronis*) epidemic in the Southern Province.

The research institute has reported to Agriculture and Plantation Industry Minister Mahinda Amaraweera that the use of this predatory mite has been very successful.

"As a biological control strategy, we have been able to reduce the coconut mite

threat to a considerable extent by applying Neoseiulus Barak, a predatory mite found in our natural environment, and about 5,000 of these predatory mites should be used in the coconut trees for at least two consecutive years," the Coconut Research Institute said. The same research institute has mentioned that no method has been found to eliminate the coconut mite disease 100 per cent. Still, it is possible to control reducing the size of coconuts by 60 per cent due to the mite disease by applying Neoseiulus Barak, the researchers say. These facts were revealed in a discussion recently held by Agriculture and Plantation Industries Minister Mahinda Amaraweera with the Coconut Development Board, Coconut Development Authority and the Coconut Research Institute, Lunuwila. 370,000 coconut trees need to be removed in Sri Lanka due to various diseases affecting coconut cultivation.

Coconut cultivations have been affected by this mite in the Southern Province and the yield has decreased by about 60 per cent. Coconut Research Institute reports have confirmed that the income from coconut exports in 2022 was 817 million US dollars and due to this coconut mite menace, the amount of coconut exported has also decreased. (*Daily News*)

## TRADE NEWS

### INDUSTRY PERSPECTIVE

Prices stayed mostly firmer anew in the vegetable oils market during the week.

Coconut oil in Rotterdam market was a dull affair again for the fourth consecutive week this week with buying support absent; the price premium over palm kernel oil while narrowed appears to be still unattractive for buyers. The market opened with firm offers at \$1,142.50-1,172.50/MT CIF for positions from November/December through to May/June 2024 partly on concerns about the adverse

weather in the Philippines and the gains in palm oil. Levels generally tracked further higher, after showing weakness, influenced by higher vegetable oils market. The latter part of the week though saw values moved sideways and by the week's end closed mostly unchanged from Thursday prices with levels at \$1,120.00-1,163.50/MT CIF.

On the other hand, the palm kernel oil market turned more active this week in a respite from single week trades in the past weeks, reporting four turnovers at \$980-995/MT CIF. Prior week's paying level was \$975/MT CIF. Opening quotes this week were mostly steady at \$945-995/MT CIF for positions from December/January through to June/July 2024 and tracked further higher to peak in the middle of the week before easing a bit towards the weekend as it followed palm oil trail. At the close all levels topped respective opening rates, unlike rival coconut oil, and stood at \$985-1,040/MT CIF.

The price premium of coconut oil over palm kernel oil narrowed this week from corresponding levels a week earlier, except in the front position. Thus, average weekly spread was trimmed to \$142.08/MT from prior week's \$162.78. Premium per position are shown following: November/December \$190.00 (\$173.00 last week); December/January \$157.00 (\$168.25); January/February 2024 \$147.35 (\$169.10); February/March \$130.95 (\$164.20); March/April \$140.20 (\$158.35); April/May \$127.20 (\$165.50); May/June \$144.60 (\$162.50); June/July \$99.33 (\$141.33).

At the CBOT soya complex, soybean futures reflected firmness earlier during the week in response to inclement weather in Brazil's crop growing areas. Higher prices of products soybean oil and meal also supported gain. By middle of the week, however, the market reversed course and headed lower under pressure from strong US dollar, and declining energy prices.

At the palm oil section, the four-day trading week cut short by holiday in Malaya showed a

firmer market earlier in the week that eventually reversed later. Earlier strength was fueled by higher CBOT soybean oil and improved demand for Malaysian palm oil. On the other hand, the profit-taking after recent gains coupled by declines in CBOT soybean oil sparked the market turnaround later during the week.

Prices of tropical oils this week for nearest forward shipment showed continued price gains. Coconut oil climbed \$30.00 from week-ago \$1,105.00 to \$1,135.00/MT CIF presently; palm kernel oil leaped \$46.00 from \$932.00 to \$978.00/MT CIF; and palm oil hiked \$22.50 from \$925.50 to \$948.00/MT CIF. As a result, the price premium of coconut oil over palm kernel oil narrowed from \$173.00 to \$157.00/MT this week while price advantage over palm oil advanced from \$179.50 to \$187.00/MT. (*UCAP Bulletin*)

### **MARKET ROUND-UP OF COCONUT OIL**

Coconut oil in Rotterdam market continued a dull affair. After a firm start, prices fluctuated within range below opening values. The market closed mostly steady with sellers quoting \$1,140 for December/January; \$1,120 for January/February 2024; \$1,120 for February/March; \$1,125 for March/April; \$1,135 for April/May; and \$1,163.50/MT CIF for May/June. Buyers were quiet during the week.

The FOB coconut oil market remained closed. (*UCAP Bulletin*)

### **SRI LANKAN FIVE-YEAR ACTION PLAN TO UP COCONUT EXPORT INCOME TO US\$ 2 BN**

Agriculture and Plantation Industry Minister Mahinda Amaraweera instructed the officials of the Plantation Industry Ministry to prepare a five-year action plan with the aim of increasing the coconut export income to US\$ two billion.

The Minister said that this five-year action plan is proposed to be implemented from next year and for that purpose it should be implemented

with the contribution of all sectors including the Coconut Development Authority, Coconut Research Board, and Lunuwila Coconut Research Institute.

Minister Amaraweera said so during a meeting held at the Agriculture Ministry regarding the future activities of the Coconut Development Authority. The Ministry officials and the Coconut Development Authority officials participated in this discussion.

Although there is a high demand for coconut and coconut-related products in our country in the international market, still 75 percent of the total coconut production in this country is used for domestic consumption. Even if the remaining 25 percent is exported, exports will be hampered in case of local coconut shortage.

Due to this, the demand of our country in the international market is attracted to other countries. In order to avoid this situation, the coconut production in this country should be increased as well as the coconut consumption pattern should be changed locally.

It was also emphasized that a large amount of coconut is wasted daily, especially in the consumption of local coconuts. (*Daily News*)

### **COCONUT PRICES FALL ON BUMPER CROP, DECLINING EXPORTS**

It is the coconut harvest in the Mekong Delta, but with exports falling, prices have halved from a year ago to VND1,500-2,900 (US\$0.06-0.12) for a nut, causing farmers losses.

Phan Van Dinh, 68, of Giong Trom District in Ben Tre, Vietnam's biggest coconut growing province, has an orchard of 2,000 square meters.

"At present we only manage to sell VND1 million worth of coconuts a month, enough only to cover costs, not profit," he said.

Traders are buying at VND2,500-2,900 apiece, down from VND5,000-5,800 a year ago, he said.

Le Van Trong, owner of a 6,000-sq.m orchard in Ben Tre, does not want to sell the 2,500 fruits he has harvested because traders are offering only VND1,500, saying they are too small.

He is now drying the coconuts to sell them as seedlings for cultivation.

Huynh Quang Duc, deputy director of the Ben Tre Department of Agriculture and Rural Development, said it is the coconut harvest season and output is large, causing prices to fall.

Ben Tre has over 74,000 hectares of orchards, or 80% of the total coconut growing area in the delta and 50% of Vietnam's.

Besides some exports to the U.S., coconuts are mainly exported to China via border trade.

"We are waiting for exports to China through the official quota with a much bigger volume, so that the life of coconut growers will improve," Duc added. (*VN Express*)

### **RISING WORLD DEMAND FOR LOCAL KING COCONUTS SPURS MODEL EXPORT VILLAGE CONCEPT**

With king coconut exports up by 117 percent in 2023, the agriculture and plantation industry has formulated a proposal to establish a model village for the cultivation of king coconuts for export next year.

Agriculture and Plantation Industries Minister Mahinda Amaraweera recently said in view of the rapidly rising demand for Sri Lankan king coconut in the international market, he had discussed with the officers of the Coconut Development Board, Sri Lanka Coconut Research Institute and Coconut Development Authority, the measures to be taken in the future for the development of coconut

cultivation in Sri Lanka and the progress made in that regard so far.

Amaraweera said that though king coconut has not been cultivated as a plantation crop to date, there is a high demand in the international market for the coconut species grown in this country.

Amaraweera added: 'In 2022, 11 million king coconuts were exported and an income of Rs. 110 million was earned. The amount of king coconuts that has been exported so far this year is 14 million and the income earned from it is Rs. 140 million.'

'Also, the amount of king coconuts exported this year has increased by 117 percent.

'I have instructed the relevant departments to conduct a soil test and identify a suitable area for king coconut cultivation and to name the specified area King Coconut Cultivation Export Model Village.'

'At present, we have not identified a variety of king coconut suitable for cultivation in our country and the traditionally cultivated king coconut species are still being grown.'

'I have instructed the Sri Lanka Coconut Research Institute to start a research project to introduce a new species of king coconut that has a good taste and attractiveness and bears fruit in a short period of time.' (*The Island*)

### **VIETNAM'S COCONUT INDUSTRY TARGETS USD1.0 BILLION EXPORT INCOME**

The Vietnam Coconut Association (VCA) set a goal of USD1.0 billion in export turnover at its second congress for the 2023-2028 tenure held recently.

Earlier, the value of coconut was not fully tapped, resulting in export turnover of just over USD100,000 in 2009, said VCA Deputy General Secretary Cao Ba Dang Khoa, adding during its first tenure of 2010-2023, the VCA

has recommended policies and orientations to develop the coconut industry to competent ministries and sectors, while connecting with food, handicraft, and plantation industries to improve coconut products' competitiveness. Additionally, the association has guided farmers and enterprises to better production capacity, helping affirm coconut brands and prestige in the domestic market and foreign markets, thus increasing export revenue, he said.

Last year, Vietnam shipped USD940 million worth of coconut-based and coconut-related products. In the first months of 2023, export revenue fell sharply due to global headwinds. However, from the second quarter, robust signs have loomed on the horizon, with the USA and EU allowing imports of Vietnamese coconut, and China considering official import of the fruit. Vietnam has 90 coconut businesses, 42 of which produce coconut-based goods. (*UCAP Bulletin*)

The increase was on account of the rise in biodiesel use at 956 thousand MT from 719 thousand MT (+33.0%) last month and 738 thousand MT last year (+29.5%). Increase was also observed in utilization for food at 898 thousand MT from 853 thousand MT (+5.3%), month-ago but was down from last year at 923 thousand MT (-2.7%). This contrasted with decline in oleochemicals at 183 thousand MT from 185 thousand MT last month but higher from last year at 180 thousand MT.

Total exports in August reached 2,073 thousand MT, to record a shortfall of 41.0% from July at 3,519 thousand MT, and a bigger deficit of 54.9% from August last year at 4,593 thousand MT. The decline, according to GAPKI, was mainly due to low production and the consistent rise of domestic absorption. Of the total, palm oil was 1,571 thousand MT, below last month at 2,992 thousand MT and last year at 3,919 thousand MT, a reduction by 47.5% and 59.9%, respectively. (*UCAP Bulletin*)

## OTHER VEGEOIL NEWS

### INDONESIAN PALM OIL PRODUCTION DOWN IN AUGUST, BUT DOMESTIC CONSUMPTION UP

Indonesia's crude palm oil (CPO) production in August reached 3,855 thousand MT, while palm kernel oil (PKO) production was 366 thousand MT, for a total of 4,221 thousand MT, statistics from the Indonesian Palm Oil Association (GAPKI) revealed. The total was 11.5% lower than the previous month at 4,771 thousand MT and 2.0% lower than the previous year at 4,306 thousand MT. Despite the month's reduced output, the cumulative figure for January-August was higher by 14.8% at 36,287 thousand MT from 31,609 thousand MT in a similar period a year ago.

Total domestic consumption in August at 2,037 thousand MT topped by 14.8% consumption in July at 1,757 thousand MT as well as that of August last year at 1,841 thousand MT (+10.6%).

### NO DRAMATIC CHANGES IN COOKING OIL USAGE AMID ISRAEL-LINKED BOYCOTT OF FAST FOOD RESTOS – MPOB

The Malaysian Palm Oil Board (MPOB) said it does not see any major changes in the consumption of local cooking oil although some of the fast food chain outlets in the country that are allegedly linked to Israel are facing decline in sales.

"Some outlets may be affected but remember during the Covid-19 when we expected to a huge decline in exports of crude palm oil (CPO) as people did not dine out, it turned out we exported more to meet the demand from people who opted to cook at home and trying out new recipes," said MPOB director-general Datuk Ahmad Parvez Kadir on the sidelines of the three-day MPOB International Palm Oil Congress and Exhibition (PIPOC 2023), adding it was yet too early to predict whether the boycott will affect local consumption of cooking by the food chains and at the global level.

In showing their solidarity with the Palestinians, some Malaysians have boycotted companies and goods with alleged ties to Israel. (*UCAP Bulletin*)

### **MALAYSIAN PALM OIL EXPORTS TO CHINA ANTICIPATED TO RISE THIS YEAR**

Malaysia's palm oil and palm oil-related exports to China are expected to increase this year, if not maintained at last year's level, according to Deputy Prime Minister Datuk Seri Fadillah Yusof. Fadillah is also Minister of Plantation and Commodities.

Palm oil and palm oil-related products exports last year by Malaysia to China was USD3.72 billion, constituting 11.4 percent of Malaysia's world export of palm derivatives. "There are many markets that we have not penetrated in China. Hence, we need to continue to strengthen the trade relationship between Malaysia and China," said Fadillah after holding talks with two bilateral meetings with China's Minister of the General Administration of Customs Yu Jianhua and Chinese Vice Premier Liu Guozhong last week.

Fadillah's visit to China was a follow-up to Prime Minister Datuk Seri Anwar Ibrahim's visit to the country in March this year. According to Fadillah, China committed to further increase the amount of palm oil imports as well as downstream products that contain palm oil from Malaysia. The country plans to not only import palm oil but also derivatives including tocotrienol, the palm oil-based vitamin E. (*UCAP Bulletin*)

### **WORLD OLIVE OIL PRODUCTION TO DECLINE FOR THE SECOND STRAIGHT YEAR**

The world's seven largest olive oil-producing countries are expected to produce 1.97 million MT in the 2023/24 crop year. This was based on interviews with farmers, millers and local officials as harvests takes place across the Mediterranean basin. The figure is 7 percent lower than the prior crop year and 23 percent

behind the average of the previous four crop years.

Spain, Italy, Tunisia, Greece, Turkey, Morocco, and Portugal together were responsible for 72 percent of global olive oil production last year. Over the last four crop years, that figure was 82 percent. As a result, world olive oil production in the 2023/24 crop year will likely be below the 2.94 million MT produced in the 2022/23, the lowest yield since 2016/17, the report said.

According to Juan Vilar, a Spain-based strategic consultant for the olive oil sector, global production may decline to 2.4 million MT, a shortfall of 18 percent from the 2022/23 crop year and 24 percent below the average of the previous four crop years. While producers in Spain, Italy, Tunisia, Morocco and Portugal expect superior harvest this year, the production increases are expected to be more modest than the significant declines projected in Turkey and Greece. (*UCAP Bulletin*)

## **HEALTH NEWS**

### **HOW TO APPLY COCONUT OIL IN HAIR FOR MAXIMUM BENEFITS**

Using coconut oil in your hair can provide a range of benefits, including moisturizing, conditioning, and promotion healthy hair growth. Here's a step-by-step guide to help you apply coconut oil to your hair for maximum benefits.

**Step 1: Choose the right type of coconut oil.** Opt for organic, unrefined, virgin coconut oil. This type is minimally processed and retains more of the beneficial nutrients.

**Step 2: Determine your hair type and condition.** Consider your hair type (straight, curly, wavy) and its condition (dry, damaged, normal) to decide how much coconut oil you

will need. Dried or more damaged hair may benefit from more oil, while less may be needed for normal for normal or oily hair.

**Step 3: Prepare your hair.** Start with clean, dry hair. If your hair is extremely tangled, you may want to detangle it gently using a wide-toothed comb.

**Step 4: Warm the coconut oil.** Coconut oil solidifies at temperatures below 76°F (24°C). to use it, warm a small amount (enough to cover your hair) in your hands by placing the jar in warm water. This will make it easier to apply.

**Step 5: Apply to hair and scalp.** Begin by applying a small amount of coconut oil to your scalp, massaging it in gently. Then, work your way down the length of your hair, paying extra attention to the tips.

**Step 6: Massage your scalp.** Gently massage your scalp for about five minutes. This can help improve blood flow, which may promote hair growth and relaxation.

**Step 7: Distribute evenly.** Use a wide-toothed comb of your fingers to ensure the coconut oil is evenly distributed throughout your hair.

**Step 8: Leave it in.** you can leave the coconut oil in your hair for at least thirty minutes, but for deeper conditioning, consider leaving it in overnight. If you leave it in overnight. Cover your hair with a shower cap or towel to avoid making a mess.

**Step 9: Rinse and shampoo.** After the desired time has passed, rinse your hair thoroughly. You may need to shampoo twice to ensure all the oil is removed. Use a gentle, sulfate-free shampoo.

**Step 10: Style as desired.** After rinsing and drying your hair, style it as you normally would. You should notice your hair feeling softer, smoother, and more manageable. (*The Times of India*)

## THE IDEAL TIME TO DRINK COCONUT WATER IS...

We all love our share of hydrating drinks during the day. They not only quench our thirst but also give our body the much-needed energy. But is there a good time to drink coconut water? A post that we came across on social media read that just drinking one glass of coconut water at 10 am daily helps in weight management, improves skin hydration, and prevents bacterial infections. So, we decided to ask experts.

Coconut water is low in calories, and according to a report in Medical News Today, there are only 45 calories in one cup. So, every time you are tempted to have soda or other sugary drinks, go for coconut water.

### ***When is it a good time to drink coconut water?***

Dr Pankaj Chaudhary, senior consultant, internal medicine, Max Super Speciality Hospital, Vaishali urged that it is advised for people suffering from illnesses or dehydration issues. "It is not needed for healthy people on an everyday basis," said Dr Chaudhary.

Dr Shrey Srivastav, MD (internal medicine), Sharda Hospital, Noida said that coconut water boosts immunity and kickstarts the body's metabolism. "It is better to drink coconut water early in the morning rather than in the evening and drink it in moderation," said Dr Srivastav.

Coconut water is an excellent natural electrolyte source, making it a good choice for rehydration after exercise, said Dr Rinky Kapoor, consultant dermatologist, cosmetic dermatologist and dermato-surgeon, The Esthetic Clinics."

### ***When not to have?***

Don't drink coconut water if you have high levels of potassium in the blood. "Coconut

water contains high levels of potassium. So people with kidney disease and people who have rhythm disorder of heart should not take it," said Dr. Srivastav.

Some people find coconut water a soothing and hydrating option before bedtime, but be mindful of your preferences and how it affects your sleep, said Dr Kapoor.

Additionally, individual preferences and reactions can vary, so Dr Kapoor advised that one should listen to their body and enjoy coconut water when it aligns with their routine and tastes. (*Indian Express*)

## COCONUT RECIPE

### VINIDALOUSH WITH PLANTAIN AND COCONUT FUNGEE

#### Ingredients

##### For the green seasoning

1. 2 sprigs fresh thyme
2. 10 g fresh bay leaf
3. 1 small bunch flatleaf parsley
4. 1 small bunch fresh coriander
5. 4 spring onions
6. 10 garlic cloves
7. 1 green chilli or 1 Scotch bonnet, depending on how much heat you like
8. 6 small Caribbean seasoning peppers (about 20 g), or a mix of red, yellow, and/or green mini sweet peppers
9. ½ white onion
10. 400 ml cold pressed rapeseed oil, or any neutral oil
11. salt and freshly ground black pepper
12. For the marinade
13. 200 ml sherry vinegar
14. 5 tbsp green seasoning (see above)
15. 2 tsp ground allspice
16. 4 bird's-eye chillies, thinly sliced
17. 1 tsp cumin seeds
18. 1 tsp coriander seeds

##### For the vinidaloush

1. 2.4 kg pork belly, deboned, skin on, skin and flesh scored
2. 2 large pinches sea salt
3. freshly ground black pepper
4. For the plantain and coconut fungee
5. 1 very ripe (dark brown/black) plantain, peeled and roughly chopped
6. 300 ml/½ pint stock of your choice
7. 400 ml tin coconut milk
8. 1 tsp Caribbean curry powder
9. pinch fresh thyme leaves
10. 300 g coarse cornmeal or polenta
11. unsalted butter, for turning/swirling
12. big pinch salt and coarsely ground black pepper

##### For the sauce

1. pork cooking juices
2. remaining marinade
3. 2 tbsp clear honey
4. 120 g cold unsalted butter, diced

#### Method

1. To make the green seasoning, add all the ingredients to a food processor and season to taste with salt and pepper. Blend to the consistency of a salsa verde and keep in an airtight jar in the fridge for up to 2–3 weeks.
2. To make the marinade, combine all the ingredients together in a bowl.
3. To prepare the vinidaloush, place the pork belly in a large bowl, then pour over the marinade, making sure the pork is coated all over. Cover the bowl with cling film and leave the pork in the fridge to marinate overnight.
4. The next day, preheat the oven to 140°C/120°C Fan/Gas 1. Remove the pork belly from the marinade and transfer it to a board, reserving the bowl of marinade. Rub the salt into the scored skin of the pork belly. Set a heavy-based, wide frying pan over a high heat until it is almost smoking-hot. Lay the pork belly into the pan folded in half, skin-side down and sear until you get a good colour all over, turning the belly so that both sides get evenly seared.
5. Transfer the pork belly to a roasting tin, skin-side down. Spoon a couple of tablespoons of

the reserved marinade over the scored flesh and give it a couple of grinds of black pepper.

6. Slip the roasting tin into the preheated oven and roast for 3 hours, checking on the pork every hour and spooning over a little more of the marinade. When the meat is completely tender, remove from the oven, transfer the pork belly to a board, cover with kitchen foil and leave to rest for at least 30 minutes.
7. While the pork is resting, make the plantain and coconut fungee. Add all the ingredients, apart from the cornmeal and butter, to a medium saucepan. Bring to the boil and simmer for about 8–10 minutes until the plantain is tender. Remove from the heat and, using a potato masher or a fork, mash the soft plantain into the cooking liquid.
8. Return the pan to a medium heat and bring to a gentle simmer. Add the cornmeal in a steady stream, while continuously stirring/beating the mixture with a wooden spoon. It will quickly come together into a very stiff kind of porridge. Keep beating the mixture for another 2 minutes, then pinch off a little piece and taste to check the texture – it should now be smooth and soft. If it's not, cook and stir for a little longer before checking again. Remove from the heat.
9. Add a knob of butter and a large spoonful of the fungee to a small bowl. Swirl the bowl around, tossing the mixture around the bowl until it forms a smooth ball (don't look for a perfect round result, you just want it to come together). Tip out and repeat with another spoonful of fungee and 1 teaspoon more butter for every other swirl.
10. When you are nearly ready to serve, take the pork cooking juices from the pan and what is left of the marinade and pour both into a large, wide frying pan. Set over a medium heat and let the mixture bubble up. Add the honey along with a splash of water and bubble for a few more minutes. Finally, add the butter and bubble for another few minutes, then remove the sauce from the heat.
11. To serve, place the ball of fungee onto each serving plate, carve the rested meat and pour the sauce from the pan back over the succulent meat. (*BBC Food*)

## STATISTICS

**Table 1. Monthly Export of Coconut Shell Charcoal by Selected Countries 2021 - 2023 (In MT)**

MONTH	Indonesia			Philippines			Sri Lanka		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
January	16,585	17,456	14,435	5,273	7,395	7,793	709	930	767
February	15,357	13,596	15,008	6,230	10,228	8,685	1,045	943	882
March	12,288	16,535	16,907	10,382	11,694	11,824	882	1,050	348
April	15,430	13,639	11,384	8,979	9,429	11,517	548	1,576	416
May	11,241	7,376	17,456	9,457	6,739	10,444	991	1,211	810
June	9,869	11,796	16,603	9,182	10,517	8,168	412	1,475	792
July	9,253	10,866	17,676	9,439	9,986		733	1,398	892
August	10,019	13,328	15,863	10,071	10,438		489	1,670	1,044
September	10,319	13,896	15,613	13,049	10,805		484	1,378	1,355
October	13,270	13,984		9,390	9,181		547	606	
November	14,877	14,712		12,311	9,010		818	659	
December	16,016	16,137		10,047	8,268		697	1,214	
<b>TOTAL</b>	<b>154,524</b>	<b>163,322</b>	<b>140,945</b>	<b>113,810</b>	<b>113,690</b>	<b>58,431</b>	<b>8,355</b>	<b>14,110</b>	<b>7,306</b>

Source: BPS-Statistics Indonesia, UCAP, and Coconut Development Authority, Sri Lanka

**Table 2. Monthly Export of Activated Carbon by Selected Countries 2021 - 2023 (In MT)**

MONTH	Indonesia			Philippines			Sri Lanka		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
January	1,415	2,184	1,440	6,170	5,873	5,466	4,311	3,918	3,441
February	2,250	2,239	1,430	5,616	6,229	4,203	3,701	3,529	4,035
March	2,609	2,327	1,415	7,193	8,171	5,859	5,050	4,424	4,311
April	2,379	2,419	1,361	5,782	7,455	5,334	3,579	5,093	4,021
May	1,929	1,842	1,607	5,865	7,051	6,139	4,781	4,796	5,518
June	1,720	2,390	1,637	5,642	6,498	5,710	4,491	4,904	4,342
July	1,925	2,006	1,734	7,071	7,430		4,025	5,034	4,422
August	1,550	2,251	1,786	5,385	7,789		3,805	4,890	4,231
September	1,799	2,020	1,797	6,876	7,246		4,435	5,376	4,317
October	1,607	2,006	1,575	6,030	5,768		4,555	5,276	
November	2,348	1,946		6,450	4,963		4,650	3,720	
December	2,280	2,200		5,760	6,215		5,336	3,870	
<b>TOTAL</b>	<b>23,812</b>	<b>25,830</b>	<b>15,781</b>	<b>73,840</b>	<b>80,688</b>	<b>32,711</b>	<b>52,719</b>	<b>54,830</b>	<b>38,638</b>

Source: BPS-Statistics Indonesia, UCAP, and Coconut Development Authority, Sri Lanka

**Table 3. Export Destination of Activated Carbon from India and Indonesia, January-September 2023**

India			Indonesia		
Country of Destination	Volume (MT)	Value (US\$ 000)	Country of Destination	Volume (MT)	Value (US\$ 000)
1. USA	14,281	28,840	1. JAPAN	3,714	4,263
2. GERMANY	7,280	12,630	2. CHINA	4,960	3,273
3. TURKEY	6,678	9,320	3. GERMANY	3,339	1,624
4. RUSSIA	5,319	10,070	4. AUSTRALIA	3,565	1,606
5. JAPAN	4,921	8,650	5. TAIWAN	2,142	1,139
6. BELGIUM	4,741	9,510	6. UNITED STATES	978	535
7. ITALY	3,889	5,790	7. NETHERLANDS	949	528
8. SRI LANKA DSR	3,880	6,990	8. KOREA, REP. OF	514	300
9. KOREA RP	2,821	6,100	9. SRI LANKA	313	241
10. U ARAB EMTS	2,747	4,890	10. MALAYSIA	224	150
11. OTHERS	49,495	81,600	11. OTHERS	1,054	547
<b>Total</b>	<b>106,052</b>	<b>184,390</b>	<b>Total</b>	<b>21,752</b>	<b>14,206</b>

Source: BPS-Statistics Indonesia and Department of Commerce, India

**Table 4. US Imports of Coconut Shell Charcoal based Activated Carbon, 2021-2023**

Month	2021		2022 <sup>r</sup>		2023 <sup>r</sup>	
	Volume (MT)	Value US\$'000	Volume (MT)	Value US\$'000	Volume (MT)	Value US\$'000
January	4,569	9,221	4,346	11,890	5,104	11,294
February	3,334	7,157	3,752	8,976	2,817	6,822
March	4,413	9,764	5,158	13,025	3,859	9,301
April	3,155	6,673	5,081	12,464	3,452	7,967
May	3,728	8,645	6,063	15,411	3,418	8,421
June	4,245	9,641	6,404	16,212	4,269	8,929
July	4,130	10,727	5,446	13,609	4,420	8,392
August	3,316	8,017	6,315	14,927	4,210	7,866
September	3,165	7,833	7,126	16,857	3,420	6,836
October	2,950	6,881	6,600	15,926	5,209	10,728
November	4,470	11,197	5,495	13,325		
December	4,353	12,074	4,645	12,082		
<b>Total</b>	<b>45,830</b>	<b>107,831</b>	<b>66,432</b>	<b>164,704</b>	<b>40,179</b>	<b>86,555</b>

Source: U.S. Census Bureau, r: revised figure

# ICC PUBLICATIONS AVAILABLE FOR SALE

## Climate Change Adaptation and Mitigation Strategy for a Resilient and Sustainable Coconut Agroindustry - Proceedings of the 50<sup>th</sup> COCOTECH Conference & Exhibition, 2022

Price: US\$50



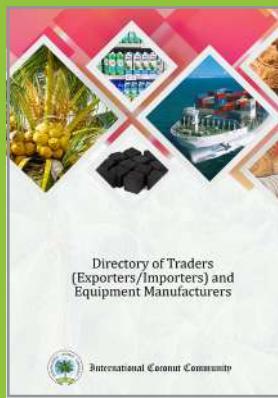
**COCOINFO International Vol 30 No. 2, 2023** – A semi-annual, scientific and semi-technical based in order to disseminate useful information of the coconut sector, around the globe.

Annual subscription price:  
US\$35 (ICC Member Countries)  
US\$40 (Non-Member Countries)



## Directory of Coconut Traders & Equipment Manufacturers

Price: US\$50



**Coconut Statistical Yearbook 2020**

Price:  
US\$50 (ICC Member Countries)  
US\$60 (Non-Member Countries)



## CORD Vol. 39, 2023 – An annual international journal on Coconut Research & Development

Price:  
US\$40 (ICC Member Countries)  
US\$50 (Non-Member Countries)



**Cocommunity – Monthly newsletter of the International Coconut Community**

Annual subscription price:  
US\$50 (ICC Member Countries)  
US\$60 (Non-Member Countries)



\* All prices are excluded from shipping charges

Order via website [www.coconutcommunity.org](http://www.coconutcommunity.org) or write e-mail to [icc@coconutcommunity.org](mailto:icc@coconutcommunity.org)  
Payment can be made by PayPal & wired bank transfer

# ICC CORD JOURNAL PUBLICATION

Silence Negative Campaigns, with Science.

ISSN - 0215-1162

# Cord

International Journal on Coconut R & D - Vol. 39, 2023

ISSN - 0215-1162

# Cord

International Journal on Coconut R & D - Vol. 38, 2022

- Physicochemical and Rheology Properties of Ice Cream Prepared from Sunflower Oil and Virgin Coconut Oil - Linda Trivana, Nugraha Edhi Suryana, Dase Hunneeti, S. Joni Munarso, Adhiyita Yudha Pradhana, Barlina Rindengen
- Collection Methods to Preserve Nutritive and Physicochemical Properties of Unfermented Coconut (*Cocos nucifera*) Sap - H. P. D. T. Hewa Pathirana, I. Wijesekara, L. L. W. C. Yalegama, Jayasinghe M. A.
- *Per Se* Performance of Elite Coconut Genotypes and Hybrids for Economic Quality Traits and Oil Yield - S. Pranetha, R. Sudha, S. Nivitha, R. Surya and R. Mahalakshmi
- Evaluation of Biomass Production of CO-3 Fodder Grass Under Coconut and Its Effect on Nut Yield of Intermediate Zone Coconut Plantations in Sri Lanka - S. H. S. Senarathne, S. A. S. T. Ravendra, S. S. Udummann and M. A. N. A. Kumara
- Genetic Relationships of Indigenous King Coconut (*Cocos nucifera* L) Populations as Determined by SSR Markers - M. K. Meegahakumbara, M. T. N. Indrachapa, T. S. Baddegama, M. M. Hettiarachchi, H. D. M. A. C. Dissanayaka, C. R. K. Samarasinghe, P. R. Weerasinghe and P. N. Dasanayake
- Partial Characterization of Polysaccharides Isolated from Defatted Desiccated Coconut Kernel - Loku Liyana Waduge Chandi Yalegama, Desiree Nedra Karunaratne, Ramaiah Sivakanesan



International Coconut Community

- *In Vitro* Study on Actinomycetes Extracts Against the Stem Bleeding Disease of Coconut - M. M. Nisha, S. Santhosh Kumar, N. Ibomcha, S. Susmitha, B. V. Muddukrishna
- Estimating Technical Efficiency and its Determinants in the Coconut Plantations: The Case of Kununegala Plantations Limited, Sri Lanka - S. M. M. Samarakoon, L. H. P. Gunarathne, J. Weeraweha
- Coconut Growers' Knowledge and Perceptions on Climate Change and Adaptation Strategies in Puttalam District of Sri Lanka - Ruvani S. W. Godage, Bandara Gajayayake
- Estimating Coconut Production and Productivity of Local Tall in Talabu Island Using Drone and Sampling Population - Hengky Novarianto
- A Study on Acid Hydrolysis and Composition of Polysaccharides Concentrated from Coconut Kernel - Loku Liyana Waduge Chandi Yalegama, Desiree Nedra Karunaratne, Ramaiah Sivakanesan
- Evaluation of Staple Foods Supplemented with Defatted Coconut Testa Flour - S. A. P. Rushda, B. S. K. Ulupathakumbara, C. Yalegama, D. T. Hewapathirana, J. M. N. Marikkar



International Coconut Community

- Physicochemical Properties of Virgin Coconut Oil Extracted from Different Coconut (*Cocos nucifera* L) Varieties - H. P. D. T. Hewa Pathirana, L. L. W. C. Yalegama, J. A. D. Madusanka, L. M. I. Senarathne
- The Physical and Functional Properties of Partially Defatted Coconut Testa Flour - S. S. K. Marasinghe, C. Yalegama, D. T. H. Pathirana, J. M. N. Marikkar
- Preliminary Investigation of The Potential of Coconut Sugar Production Using Dwarf Varieties - Hengky Novarianto, Meity A. Tulaio, Sukmawati Mawardhi
- Effect of Selected Leguminous Cover Crop Species on the Productivity of Coconut Cultivated in Reddish Brown Latosolic Soils in Sri Lanka - S. H. S. Senarathne, S. S. Udummann
- Perceptions and Efficacy of Oral Rinsing with Two Types of Coconut Oil: A Comparative Study - Faizal C. Peedikayil, Neethu P. Diwaker, Chandru T. P., Soni Kottayi



International Coconut Community

- Integration of *In Silico* and *In Vitro* Approach to Reveal the Anticancer Efficacy of Virgin Coconut Oil - Babita Pruseth, Silvi Banerjee, Amit Ghosh
- Detection of Weligama Coconut Leaf Wilt Disease Phytoplasma by Real-Time Polymerase Chain Reaction - H. T. R. Wijesekara, S. A. C. N. Perera, D. Bandupriya, M. K. Meegahakumbara, Lalith Perera
- The Coconut Industry: A Review of Price Forecasting Modelling in Major Coconut Producing Countries - M. G. D. Abeysekara, K. P. Waidyaratne
- Design and Development of Semi-Direct Copra Dryer for Flat Terrain - Mencius B. Lesidan
- Evaluation of Nutritional Composition of Defatted Coconut Flour Incorporated Biscuits - H. P. D. T. Hewa Pathirana, W. M. K. Lakdusinghe, L. L. W. C. Yalegama, C. A. T. D. Chandrapeli, J. A. D. Madusanka
- Propagation and Possible Allelopathic Effects of *Vernonia zeylanica* on Selected Bioassay Species - S. H. S. Senarathne, S. S. Udummann



International Coconut Community

To access CORD Journal digitally, please visit:  
[www.journal.coconutcommunity.org](http://www.journal.coconutcommunity.org)



@CoconutCommunity



International Coconut Community

DOAJ  
DIRECTORY OF  
OPEN ACCESS  
JOURNALS

GARUDA  
GARBA BUJUKAN DIGITAL

g Google  
Scholar



FROM CONCEPT TO COMPLETION

# COCONUT PROCESS

Technology Perfected



## GOMA GROUP OF COMPANIES

Plot No. B/66, Road No. 34, Wagle Estate, Thane - Mumbai (India)  
CONTACT: +91 93226 54235/6/2 | EMAIL ID: [exports.pte@goma.co.in](mailto:exports.pte@goma.co.in) | [www.goma.co.in](http://www.goma.co.in)

India | Nepal | UAE | Sri Lanka | Malaysia | Egypt | Kenya | Ethiopia | Nigeria

# DESICCATED COCONUT PROCESSING MACHINERY

"Over 100 machines in operation worldwide"



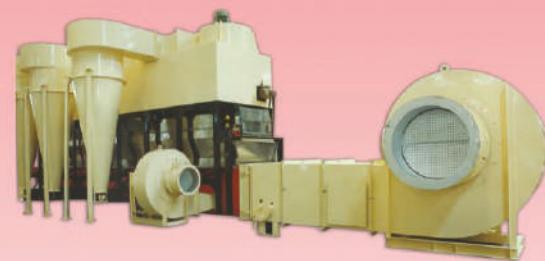
## BAND DRYER (APRON/CONTINUOS TRAY DRYER)

for Desiccated Coconut Granules, Chips & Toasted D/C

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 MACHINE

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



# GEMTECH PROJECTS LLP.

10/C, Middleton Row, 3rd Floor, Kolkata - 700 071, India

Tel: +91-33-2217 7328 (4 Lines) | Mobile: +91 9831173874, +91 9831131196 | Fax: +91-33-2217 7333

E-mail: [info@coconutprojects.com](mailto:info@coconutprojects.com) | [sg@gemforgings.com](mailto:sg@gemforgings.com) | [www.coconutprojects.com](http://www.coconutprojects.com)

**INTERNATIONAL COCONUT COMMUNITY**  
**PO Box 1343**  
**JAKARTA - INDONESIA**

**PRINTED MATTER**

**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 Commission for Asia and the Pacific (UN-ESCAP), the ICC is an independent regional intergovernmental organization which consist of twenty one member countries and accounts for 85-90% of the world production of coconut. The ICC member countries are: Côte d'Ivoire, 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.

The subscription rates for the *Cocommunity* excluding of postage are: US\$50.00 per year for ICC member countries, US\$60.00 for non-ICC member countries.

*For subscription, please write to:*

**INTERNATIONAL COCONUT COMMUNITY**

8<sup>th</sup> Floor, Bappebti Building, Jl. Kramat Raya 172

Central Jakarta 10430, Indonesia

or P.O. Box 1343, Jakarta 10013, Indonesia

Phone : (62-21) 3100556-57

Fax : (62-21) 3101007

E-mail : [icc@coconutcommunity.org](mailto:icc@coconutcommunity.org) or [apcc@indo.net.id](mailto:apcc@indo.net.id)

[www.coconutcommunity.org](http://www.coconutcommunity.org)