



# The Cocommunity

Monthly Newsletter of the International Coconut Community

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International Coconut Community



@coconutcommunity

# INTEGRATED COCONUT PROCESSING MACHINERY AND SOLUTIONS



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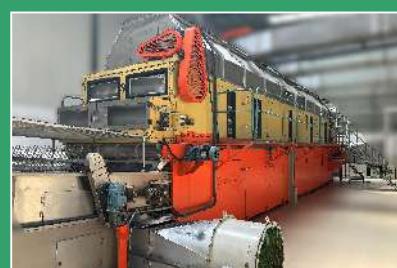
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## THE EXECUTIVE DIRECTOR SPEAKS

### ***"Bridging Generations: Fostering a Resilient Coconut Industry Through Youth Engagement"***



The future of the coconut industry hinges on several major factors, including engaging the youth. With their energy, adaptability to new technology, networking and collaboration skills, and innovative creativity, young individuals hold the key to overcoming the challenges faced by the sector, from stagnant production to the complexities of meeting global market demands. By empowering our youth, we can unlock innovative solutions and cultivate a sustainable, thriving coconut industry.

To this end, we have launched a two-year program titled "Empowering the Future of Coconut Sector: A Youth-Led Transformation Program through Sustainable Partnerships." This initiative aims to actively involve young people in the coconut sector by providing targeted training, skill development, and entrepreneurial opportunities. Participants will be equipped with essential tools and knowledge for success.

Our vision is to foster an entrepreneurial mindset among the youth and encourage diverse income sources, creating a resilient and economically vibrant community that can withstand external economic shocks. We also recognize the importance of knowledge transfer and continuous learning, establishing mechanisms for the exchange of expertise and best practices to ensure global competitiveness in our industry.

Furthermore, we aim to instill an understanding in the next generation of the crucial importance of coconut diversity conservation and the utilization of coconut germplasm for future needs and improved production. This initiative will include education on the preservation of genetic resources, breeding, and cultivation according to the international standards, emphasizing their potential for advancing our industry.

In addition, this initiative will drive holistic community development, enhance social cohesion, and improve infrastructure in coconut-growing regions. By providing young individuals pathways to participate in the coconut market, we are investing in the long-term sustainability and competitiveness of our sector.

I firmly believe that by placing our trust in the youth of the coconut sector, we are not only securing the future of our industry but also cultivating a more inclusive, diverse, and innovative community that benefits us all. Together, let us embark on this journey towards a thriving coconut sector, powered by the passion and dedication of the next generation.

Thank you.

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

**DR. JELFINA C. ALOUW**  
Executive Director

## PREVAILING MARKET PRICES OF SELECTED COCONUT PRODUCTS AND OILS

**March 2024 marked a notable surge in the prices of various coconut-related products across major producing nations like the Philippines, Indonesia, India, and Sri Lanka. The price of Coconut Oil (CNO) saw an uptick in the Philippines, India, Indonesia and Sri Lanka. Additionally, the price of Desiccated Coconut (DC) experienced increases in the Philippines, Indonesia, and Sri Lanka.**

**COPRA:** In March 2024, the prices of Copra in Indonesia exhibited an increase, reaching US\$712 per metric ton, compared to US\$659 per metric ton in the preceding month. Noteworthy was the significant rise of US\$106 per metric ton from the same period in the previous year. Concurrently, the Copra market in the Philippines experienced a modest uptick, rising from US\$635 per metric ton in February 2024 to US\$654 per metric ton in March 2024. Despite this increase, it maintained a US\$27 per metric ton lead over the corresponding period of the previous year, which reported prices at US\$627 per metric ton.

**COCONUT OIL:** In March 2024, Coconut Oil prices exhibited a coordinated upward trend in Indonesia, India, Philippines, and Sri Lanka. In Europe (C.I.F. Rotterdam), the average price surged to US\$1,254 per metric ton, reflecting a 13% increase compared to the previous year. Similarly, the Philippines witnessed a local market settlement at US\$1,214 per metric ton, representing a \$104 rise from the previous year. Meanwhile, Indonesia experienced a significant surge, with local prices climbing to US\$1,225 per metric ton in March 2024 from US\$1,134 per metric ton in February 2024, indicating an increase of US\$91 per metric ton compared to February 2023.

**COPRA MEAL:** An examination of Copra Meal prices reveals a nuanced regional perspective.

In the Philippines, the average domestic price reached US\$232 per metric ton in March 2024, exhibiting a slight month-over-month decline. Notably, this figure represents a US\$68 per metric ton decrease compared to March 2023. Similarly, Indonesia experienced a decrease in average domestic Copra Meal prices, reaching US\$257 per metric ton in March 2024. This translates to a US\$36 per metric ton decline year-over-year.

**DESICCATED COCONUT:** In March 2024, the average price of DC (Desiccated Coconut) FOB (Free on Board) USA rose to US\$1,874 per metric ton, marking a increase of US\$74 per metric ton from the last month. Sri Lanka experienced an increase in the domestic price of Desiccated Coconut to US\$1,917 per metric ton, while the Philippines maintained a steady DC price in the domestic market at US\$2,039 per metric ton. Indonesia's FOB price for DC surged to US\$1,980 per metric ton, surpassing both the figures from the previous month and the previous year, which were US\$1,400 per metric ton.

**COCONUT SHELL CHARCOAL:** March 2024 saw a continuation of the previous month's trend in Coconut Shell Charcoal prices across the region. The Philippines experienced a slight decline, with average prices remaining at US\$361 per metric ton. Conversely, Indonesia maintained stable prices at US\$459 per metric ton. In Sri Lanka, prices exhibited a marginal increase, reaching US\$383 per metric ton.

**COIR FIBRE:** In Sri Lanka, the domestic trade of Coir Fiber in March 2024 showed mixed fiber averaging at US\$68 per metric ton, with bristle ranging between US\$469 and US\$656 per metric ton. Meanwhile, Indonesia maintained the price of mixed raw fiber at US\$110 per metric ton in March 2024, indicating a slight increase from the previous year's figure of US\$90 per metric ton.

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

| Products/Country                     | 2024  | 2024  | 2023              | 2024  |
|--------------------------------------|-------|-------|-------------------|-------|
|                                      | Mar   | Feb   | Mar (Annual Ave.) |       |
| <b>Dehusked Coconut</b>              |       |       |                   |       |
| Philippines (Domestic)               | 144   | 134   | 136               | 135   |
| Indonesia (Domestic, Industry Use)   | 203   | 202   | 160               | 201   |
| Sri Lanka (Domestic, Industry Use)   | 232   | 219   | 255               | 219   |
| India (Domestic Kerala)              | 474   | 475   | 423               | 465   |
| <b>Copra</b>                         |       |       |                   |       |
| Philippines (Dom. Manila)            | 654   | 635   | 627               | 639   |
| Indonesia (Dom. Java)                | 712   | 659   | 606               | 674   |
| Sri Lanka (Dom. Colombo)             | 1,124 | 1,054 | 1,355             | 1,075 |
| India (Dom. Kochi)                   | 1,147 | 1,151 | 1,043             | 1,134 |
| <b>Coconut Oil</b>                   |       |       |                   |       |
| Philippines/Indonesia (CIF Rott.)    | 1,254 | 1,175 | 1,111             | 1,185 |
| Philippines (Domestic)               | 1,214 | 1,144 | 1,110             | 1,161 |
| Indonesia (Domestic)                 | 1,225 | 1,134 | 1,121             | 1,160 |
| Sri Lanka (Domestic)                 | 1,963 | 1,819 | 2,305             | 1,921 |
| India (Domestic, Kerala)             | 1,817 | 1,775 | 1,715             | 1,793 |
| <b>Desiccated Coconut</b>            |       |       |                   |       |
| Philippines FOB (US), Seller         | 1,874 | 1,800 | 1,874             | 1,813 |
| Philippines (Domestic)               | 2,039 | 2,039 | 2,039             | 2,039 |
| Sri Lanka (Domestic)                 | 1,917 | 1,857 | 1,727             | 1,848 |
| Indonesia (FOB)                      | 1,980 | 1,800 | 1,400             | 1,843 |
| India (Domestic)                     | 1,708 | 1,805 | 1,428             | 1,778 |
| <b>Copra Meal Exp. Pel.</b>          |       |       |                   |       |
| Philippines (Domestic)               | 232   | 244   | 300               | 241   |
| Sri Lanka (Domestic)                 | 311   | 296   | 311               | 300   |
| Indonesia (Domestic)                 | 257   | 259   | 293               | 258   |
| <b>Coconut Shell Charcoal</b>        |       |       |                   |       |
| Philippines (Domestic), Buyer        | 361   | 363   | 357               | 361   |
| Sri Lanka (Domestic)                 | 383   | 350   | 399               | 354   |
| Indonesia (Domestic Java), Buyer     | 459   | 461   | 463               | 460   |
| India (Domestic)                     | 361   | 330   | 359               | 340   |
| <b>Coir Fibre</b>                    |       |       |                   |       |
| Sri Lanka (Mattress/Short Fibre)     | 68    | 64    | 45                | 63    |
| Sri Lanka (Bristle 1 tie)            | 469   | 431   | 446               | 432   |
| Sri Lanka (Bristle 2 tie)            | 656   | 613   | 507               | 633   |
| Indonesia (Mixed Raw Fibre)          | 110   | 110   | 90                | 110   |
| <b>Other Oil</b>                     |       |       |                   |       |
| Palm Kernel Oil Mal/Indo (CIF Rott.) | 1,177 | 1,034 | 1,052             | 1,063 |
| Palm Oil Crude, Mal/Indo (CIF Rott.) | 943   | 857   | 972               | 882   |
| Soybean Oil (Europe FOB Ex Mill)     | 965   | 912   | 1,113             | 949   |

### Exchange Rate

Mar 31, '24

1 US\$ = P56.17 or Rp15,872 or India Rs83.35 or SL Rs300.44

1 Euro = US\$1.08 n.q. = no quote

## MARKET REVIEW OF ACTIVATED CARBON

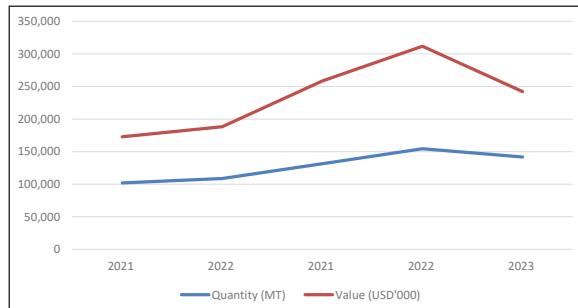
Global activated carbon market growth decelerated in 2023 due to heightened global economic instability. The United States, the leading importer of coconut shell-based activated carbon, experienced a significant 30% decline in imports throughout 2023 compared to the prior year. This downward trend appears to be persisting in 2024, with preliminary data from the US Census Bureau indicating a 7% decrease in imports during the first quarter relative to the same period in 2023. This reduction can be primarily attributed to the ongoing economic slowdown within the country. However, it is important to note that despite the recent decline, US imports of activated carbon have demonstrated a compound annual growth rate (CAGR) of 11% over the past decade.

Similarly, Japan experienced a 6% decrease in activated carbon imports during calendar year (CY) 2023, reversing the 2% increase recorded in 2022. This decline aligns with a slight downward trend in Japan's import volume over the past decade, with a CAGR of -0.35%.

On the supply side, India, a major producer of activated carbon, exported 141,862 tons to the global market during January-December 2023, reflecting an 8.1% reduction in export volume compared to the previous year. This is noteworthy given India's positive export growth between 2019 and 2022, which averaged 15%. In 2023, India exported activated carbon to 142 countries, with the United States being the primary importer with a 14% share.

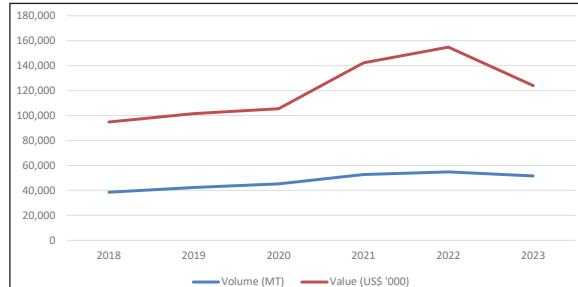
Sri Lanka, another significant producer of coconut shell-based activated carbon, also faced a negative trend in 2023. Despite enjoying an increasing export volume trend from 2018 to 2022, with a CAGR of 9.2%, Sri Lanka's export volume declined by 6% to 51,539 tons during January-December 2023. This generated export earnings of USD 124 million, a 20% decrease from the same period in 2022. However, in the first quarter of 2024, Sri

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



Source: Ministry of Commerce and Industry, India

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



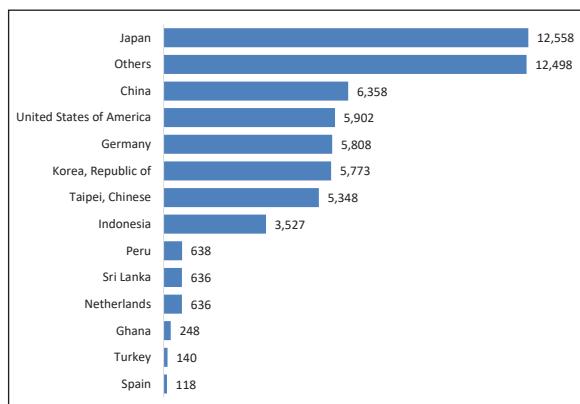
Source: Coconut Development Authority, Sri Lanka

Lanka experienced a surge in exports, shipping 15,377 tons globally, a 30% increase over the previous year's volume. Key importers of Sri Lankan activated carbon included the United States, China, Japan, Germany, and the United Kingdom.

The Philippines reported a reduction in activated carbon exports, totaling 60,818 tons in January-December 2023, down from 80,688 tons in 2022. Key importers included Japan, China, the United States, Germany, South Korea, and Chinese Taipei. This decline is primarily attributed to diminished demand in importing countries due to economic slowdowns.

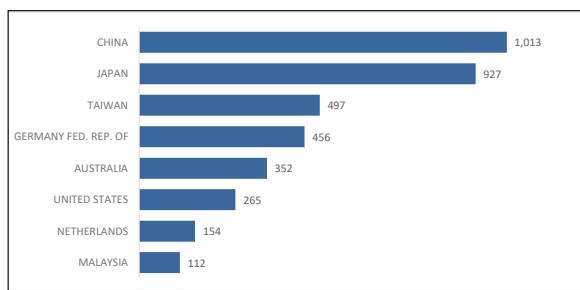
Indonesia, another notable producer of coconut shell-based activated carbon, also displayed a declining trend in 2023, with an 8% decrease

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



Source: UCAP

**Figure 4. Top 8 Export Destinations of Activated Carbon from Indonesia, January-March 2024 (MT)**

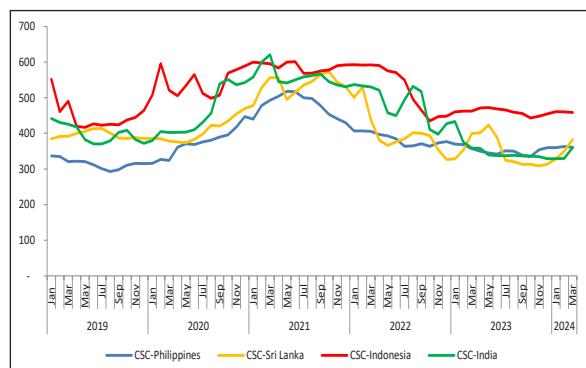


Source: BPS-Statistics Indonesia

in exports compared to the previous year. Indonesia exported 17,093 tons, generating USD 26.1 million in earnings. In the first quarter of 2024, this downward trend continued, with Indonesia shipping 3.94 thousand tons, earning USD 5.8 million. Major export destinations included China, Japan, Taiwan, Germany, Australia, and the USA.

Despite the decline in demand for activated carbon, the price of coconut shell charcoal, a key raw material, remained relatively stable across major producing nations throughout 2023. Annual average prices ranged from USD 349/MT to USD 461/MT in the Philippines,

**Figure 5. Price of Coconut Shell Charcoal US\$/MT (FOB) in the Philippines, Sri Lanka, Indonesia, and India January 2019 – March 2024**



Source: ICC Database

Indonesia, Sri Lanka, and India, highlighting market diversity. However, the first half of 2024 suggests a potential shift, with prices rising in India and Sri Lanka, while remaining stable in Indonesia and the Philippines. Monitoring price developments in the coming months will be crucial to determine if this is a temporary fluctuation or a more sustained trend.

In contrast to the stability of coconut shell charcoal prices, the export price of activated carbon showed significant fluctuations throughout 2023. For instance, Indonesia saw prices increase from USD 1,433/MT in January to USD 1,675/MT by April, followed by a decline to USD 1,468/MT in July, and then a gradual rise to USD 1,527/MT in November before dropping to USD 1,365/MT by December. Similarly, Sri Lanka experienced fluctuating prices, ranging from USD 2,391/MT in January to USD 2,671/MT in March, then decreasing to USD 2,208/MT in July, rising again to USD 2,570/MT in November, and finally dropping to USD 2,460/MT by December. These fluctuations are likely to persist in 2024 due to various factors, including shifting supply and demand dynamics, production cost variations, and global economic conditions.

## COMMUNITY NEWS

### ICAO RELEASES REVISED POSITIVE LIST ON NON-STANDARD COCONUTS FOR SUSTAINABLE AVIATION FUEL (SAF)

In a significant move towards sustainable aviation, the International Civil Aviation Organization (ICAO) has announced the release of an official notification regarding a revised positive list of wastes, residues and by-products categories as feedstocks for sustainable aviation fuel (SAF). This list now includes non-standard coconut as a by-product and potential feedstock for SAF, marking a crucial step in mitigating carbon emissions in the aviation industry.

This initiative, supported by the Government of Japan and the Green Power Development Corporation of Japan (GPDJ), in collaboration with the Indonesia-Japan Business Network (IJBNET), relevant government institutions, and the International Coconut Community (ICC), marks a milestone in the global effort to promote eco-friendly aviation practices.

Inclusion of the Non-Standard coconut to the positive list signifies a concerted effort to expand the sources of feedstock for SAF beyond traditional options, opening up opportunities for coconut-producing countries to contribute to carbon reduction in the aviation sector. This initiative aligns with the global push for sustainable development and carbon neutrality, emphasizing the importance of innovative solutions in combating climate change.

By recognizing non-standard coconuts as a viable feedstock for SAF, ICAO paves the way for increased adoption of renewable energy sources in aviation, reducing reliance on fossil fuels and mitigating the environmental impact of air travel. This development underscores the commitment of stakeholders to advance sustainable practices in the aviation industry, fostering a greener and more resilient future for air transportation.

The release of the revised positive list on non-standard coconuts for SAF reflects a collaborative effort between governments, international organizations, and industry stakeholders to promote environmental sustainability while supporting economic development in coconut-producing regions. This initiative sets a precedent for future collaborations aimed at addressing the dual challenges of climate change and aviation emissions on a global scale.

As the aviation industry continues to prioritize sustainability, initiatives like the revised positive list on non-standard coconuts serve as a testament to the collective commitment to building a more environmentally responsible aviation sector. With ongoing support and collaboration, adopting sustainable aviation fuels derived from renewable sources is poised to accelerate, driving progress towards a more sustainable and resilient aviation industry worldwide. (ICC News)

### INTERNATIONAL COCONUT COMMUNITY (ICC) EXECUTIVE DIRECTOR VISITS KENYA FOR FIRST NATIONAL COCONUT WEEK

International Coconut Community (ICC) recently attended the inaugural National Coconut Week held from 18<sup>th</sup> to 19<sup>th</sup> April 2024 at the Kilifi Convention Centre in Kilifi County, Kenya. Organized by the Agriculture & Food Authority, Nuts and Oil Crops Directorate, Kenya, the event aimed to promote sustainable development and investment opportunities in the coconut industry.

Dr. Jelfina was invited as a panelist for a seminar focusing on the global scenario of sustainable and resilient coconut industry. During her presentation, she introduced ICC as an intergovernmental organization of coconut-producing countries and emphasized the importance of attracting investment in the coconut industry. She highlighted the challenges and enormous potential of coconuts as the "tree of life" and a source of green energy. Dr. Jelfina stressed the need for sufficient coconut supply to drive investment and encouraged increased

consumption of coconut products to meet family needs for healthy coconut products and improve economies. Additionally, she informed the audience that ICC has released quality standards of coconut products as references for member countries to meet market requirements.

Furthermore, ICC Technical Working Group member, Dr. Lalith Pereira, provided valuable technical guidance on sustaining the coconut sector through sustainable farming practices. He emphasized the importance of rehabilitating existing coconut palms, gradually replanting senile palms, and establishing seed gardens to ensure the long-term sustainability of the sector.

As part of the event, a small exhibition showcased various coconut products including coconut oil, Virgin Coconut Oil (VCO), coconut flour, desiccated coconut, and briquettes. This exhibition provided attendees with insights into the diverse range of products that can be derived from coconuts, further highlighting the economic potential of the industry and the need to enhance product quality to compete in local and global markets.

The first National Coconut Week kicked off on 17<sup>th</sup> April, with the Minister of Agriculture encouraging farmers to replant coconuts during the favorable rainy season. The government distributed coconut seedlings to farmers, emphasizing the importance of coconut cultivation for both health benefits and improving family incomes.

Dr. Jelfina's visit to Kenya and her participation in the National Coconut Week underscored the ICC's commitment to promoting sustainable development and investment in the coconut industry, while also fostering collaboration and knowledge-sharing among coconut-producing nations. (ICC News)

## **COCONUT INDUSTRY BOARD OF JAMAICA IS EXPANDING AGRO-PROCESSING**

To satisfy rising consumer demand for coconut by-products, the Coconut Industry Board (CIB)

is implementing measures to improve agro-processing. Chief Executive Officer (CEO) of the CIB, Shaun Cameron, told JIS News that while there is significant demand for coconut water and coconut oil "we want our agri-processors, our small to medium-sized farmers to look at other value-added coconut products that can add value and diversity to the industry".

"The direction that the Coconut Board is focusing on now is agro-processing – how to get cottage industries up, how to get small to medium-sized farms producing," he noted.

The Caribbean Agricultural Research and Development Institute (CARDI) in a recent statement noted that Jamaica can benefit from the global resurgence in the demand for fresh and processed coconuts.

"The dynamics in the coconut market offer fadaf tremendous opportunity to agribusiness industries in Jamaica and the Caribbean. There are huge opportunities for thousands of smallholder farmers to raise incomes and profitability by connecting them to local, regional and international value chains," the statement said.

Mr. Cameron said coconut growers and agro-processors are benefiting from the CIB's research and technical support and more players are investing in the sector.

"We were able to help revive and sustain the coconut industry by working with our farmers and our partners, applying proper research technology and good agricultural practices to come up with methods of managing and maintaining the spread of lethal yellowing disease" he said.

The disease is no longer a threat to the industry as farmers are applying the best practices that have been developed over the years.

"They've come up with hybrids that are somewhat resistant to lethal yellowing due to the research. I know the industry is looking to grow. We have more getting registered as coconut farmers

because they're looking for long-term investment, something that will benefit them after they retire. The beauty of the coconut orchard is that it can be passed on from generation to generation," he said. (*Jamaica Information Service*)

### **THE CHIEF MINISTER OF INDIA ANNOUNCES COCONUT FARMERS SUPPORT MEASURES**

M K Stalin, the chief minister of Tamil Nadu, has declared financial assistance for coconut producers whose crops have been impacted by pest infestations.

At a function held in Pollachi, the Chief Minister said ₹14.4 crore will be distributed to farmers to remove the pest infested trees and three lakh coconut saplings will be distributed free of charge to farmers which are worth ₹2.80 crore. The government will also enable farmers to sell coconut.

Mr. Stalin said a new bus stand will be constructed in Ukkadam in Coimbatore city at ₹20 crore and a hockey playground will be developed at the R.S. Puram Corporation Higher Secondary School.

He also inaugurated a new super-speciality block constructed at ₹163.53 crore at the Coimbatore Medical College Hospital and spread over 1.95 lakh sq.ft.

A new facility to house the Centre of Excellence in Biotechnology at Tamil Nadu Agricultural University (TNAU), Coimbatore, was inaugurated by the Chief Minister.

An allocation of ₹430 crore was made in the Assembly for establishing the facility for undertaking research activities in crucial sectors such as agricultural science, food technology, green biotechnology, biosynthesis, bioresource utilisation and bioinformatics.

The announcements for Tiruppur district include road developments, construction of an office

complex for Tiruppur corporation at ₹75 crores, construction of 13 community halls at ₹11.17 crore, and establishment of an emergency and orthopedics ward at Palladam Government Hospital at the cost of ₹4 crores.

In the Nilgiris district, the Chief Minister said the government botanical garden will be upgraded to world class standards at ₹3 crores, 10 PDS outlets functioning in private properties will be shifted to own buildings at ₹1.5 crores and two community halls will be constructed. (*The Hindu*)

### **THE KALPAVRIKSHA PROJECT ASSISTS COCONUT FARMERS IN IMPROVING THEIR YIELD**

Four years ago, Mani, a coconut cultivator in Negamam, Coimbatore district, obtained a yield that was nearly 25 percent lower than it is today. His three acres of coconut trees were plagued by insect infestations. Joining the Kalpavriksha initiative enabled him to surmount the obstacle and enhance output.

Sasikumar, who has 200 coconut trees at Negamam, says it took 1.5 years for the yield to start improving after his trees were hit by disease four years ago. He also joined the Kalpavriksha project because the resource persons were accessible at any time of the day and ready to offer solutions.

According to Amit Bhasin, Chief Legal Officer and Secretary of the CSR Committee of Marico, the Parachute Kalpavriksha Foundation has helped nearly 81,000 coconut farmers such as Mani and Sasikumar, mostly in Tamil Nadu. The project has been active in Pollachi and nearby areas for almost two decades and encourages farmers to go in for farm ponds.

"Access to modern technology in farming, equipment, and water management are the main areas of focus through the project," he said. Concentrating on small and marginal farmers, the Foundation's thrust is now on digital tools that will benefit them. It is working with a

University to develop an automatic coconut plucking machine and the prototype is under trial, he said.

In another pilot project, the organization is collaborating with farmers to help them take advantage of government schemes and programs. As part of this initiative, the organization has established agro business centers that are managed by farmers. These farmers are trained in agricultural techniques and are able to rent out agricultural tools at affordable rates. Mr. Bhasin added. With higher yield, the farmers say they are able to realize higher revenue though coconut prices are down for more than a year now. (*The Hindu*)

### **COCONUT OIL MILLS IN KANGAYAM FACE A BLEACHED FUTURE AS A RESULT OF NAFED'S COPRA PROCUREMENT POLICY**

The scope for Kangayam town in Tiruppur district to regain its status as one of the biggest markets for copra and coconut oil in India is bleak, due to what the oil mills view as the "detrimental" procurement policy of the National Agricultural Cooperative Marketing Federation of India (NAFED).

In fact, less than 10 out of 120 coconut oil mills are functional, and there is no certainty about their future sustenance, according to N.S.N. Dhanapal, president of the Kangayam Coconut Oil Manufacturers Association.

The downfall of coconut oil mills in Kangayam began two years ago when they started losing their business base in Kerala, where copra processing units sprang up in large numbers owing to conducive industrial policy and ideal power tariff, Mr. Dhanapal said.

The oil mills in Kangayam are now in a piquant situation since coconut oil is cheaper than copra, which, is, in turn, cheaper than coconut.

The Central government procures milling copra under the Price Support Scheme through

NAFED, for a reasonable price of ₹110 per kg. But when the NAFED resorts to selling copra for a low price of ₹80 per kg during the times of high yield of coconut, the price takes a hitting.

Instead, the government could annually compensate farmers per coconut tree in order to protect them from the capriciousness of market price fluctuations during NAFED's copra sale, according to separate submissions by the association to the Union Finance and Agriculture ministries. (*The Hindu*)

### **SUSTAINABLE CONCRETE PARAMETRIC INVESTIGATION OF COCONUT SHELLS AS PARTIAL REPLACEMENT OF COARSE AGGREGATES**

The use of environmentally friendly and resource-efficient sustainable building materials has increased. Tropical areas are home to an abundance of coconut shells, a waste product of the coconut industry. They are a desirable substitute for coarse aggregates since they are permeable and lightweight. By adding coconut shells to concrete mixtures, waste disposal as well as the use of sand and gravel can be decreased.

Coconut shell aggregates improve concrete's mechanical strength and durability, although at a lesser rate than conventional aggregates. Coconut shell replacement depends on particle size, surface properties, and curing conditions. Coconut shells with concrete improve thermal insulation, density, and acoustics. In an investigation, compressive and flexural strengths of Grade M20 has been studied by replacing natural coarse aggregates with coconut shells at 0%, 10%, 20% and 30% by weight at curing intervals of 7, 14 and 28 days. Cubes and beams were casted and then tested and the results revealed that coconut shells can be used up to 10% in replacement of natural aggregates imparting a strength almost equivalent to conventional concrete.

As part of the experimental program, concrete cubes and beams were casted with and

without coconut shells. The ingredients for concrete include Portland cement, sand, coarse aggregates, coconut shells, and water.

10% more coconut shells were added to the coarse aggregates, which resulted in slight increases in flexural tensile strength. Compressive strength, on the other hand, did not rise but still produced acceptable outcomes and was nearly as high as regular concrete.

In conclusion, adding more coconut shells reduces the concrete's workability modestly but noticeably with time. When curing time for concrete is stretched out, the resulting strength is enhanced. So, a 10% replacement of coarse aggregates with coconut shells is suggested. Therefore, the alternative is technically and commercially viable. Using recycled coconut shells as aggregate can help create a greener world by lowering the demand for natural resources used to produce conventional material. (*The Times of India*)

#### **SHOBHA KARANDLAJE RELEASES NEW DWARF COCONUT VARIETY AND TWO HYBRID COCOA VARIETIES DEVELOPED BY CPCRI**

Union Minister of State for Agriculture, Farmers' Welfare and Food Processing Industries Shobha Karandlaje released a new dwarf coconut variety named 'Kalpa Suvarna' and two new hybrid varieties of cocoa developed by the Central Plantation Crops Research Institute (CPCRI) at a farmers' meet organized by the institute at its Kidu Research Station, near Dakshina Kannada.

According to K. Balachandra Hebbar, Director, CPCRI, 'Kalpa Suvarna' variety is ideal for tender coconut and copra production. The variety starts flowering 30-36 months after planting. Its fruits are large-sized, oblong, and green in colour. Its tender nut water content is 431 ml and the copra content are around 186 grams with an oil content of 64.5%. The variety yields

108 to 130 nuts per palm every year under good management. It is recommended for cultivation in Karnataka and Kerala.

"The variety is best suited for producing tender coconuts," he said. (*The Hindu*)

#### **COCONUT CULTIVATION BOARD OF SRI LANKA REQUESTS TO TAKE STEPS TO PREVENT WHITE FLY**

The Coconut Cultivation Board says that with the dry weather conditions in the country, the damage of the white fly has again been observed.

Currently, a number of selected areas in Puttalam district have been inspected, and several places in Dankotuwa, Nattandiya, Marawila city around Chillaw, Mugunuwatawana, Ariyagama, Battuluoya and Mundalama have been inspected, and accordingly, infected king coconut and coconut trees have been found in the inspected areas, like before. Therefore, it has been observed that the damage of the white fly continues.

Also, the Coconut Cultivation Board requested the coconut growers to inquire whether there is whitefly disease in other parts of the island.

The Minister of Agriculture and Plantation Industry Mr. Mahinda Amaraweera instructed the Coconut Cultivation Board to immediately inform the coconut growers about the situation and take appropriate measures to control the white fly as the affects of the white fly has been continued.

In this regard, the Coconut Cultivation Board has further discussed about the spread of the white fly and the measures that can be taken in this regard together with the district secretary of Puttalam district and the coconut growers.

Accordingly, the Coconut Research Institute has taken necessary measures to spray the mixture of Margosa oil and soap powder recommended for white fly control. According

to the Coconut Cultivation Board, the Margosa oil currently available in the regional offices will be distributed to the growers immediately through the coconut development officers. The damaged areas have been identified, and the coconut trees have been sprayed with a mixture of Margosa oil and soap powder.

Also, steps have been taken to inform all regional managers, farm planning officers, extension officers and coconut development officers of the Coconut Cultivation Board about this.

In the affected areas, the coconut development officers should be informed about the presence of white fly damage in the regional office jurisdictions and the areas where the damage is reported should be identified and reported in writing to the Coconut Cultivation National Disaster Management Operation Unit. Notifications have been given to the remaining Margosa oil growers at the regional offices to spray Margosa oil mixtures for the affected areas as per the supervision and technical instructions of the coconut development officers using power liquid sprayers.

Accordingly, 3300 liters (200 cans) of Margosa oil are required to control the damage of the white fly, so the Coconut Cultivation Board has also taken steps to purchase Margosa oil.

At present, if there are any diseases and pests of coconut cultivation, including the damage of the white fly, in a certain area, arrangements have been made to inform the Coconut Cultivation National Disaster Management Operation Unit established at the Coconut Development Training Center, Lunuwila by phone number 032-3135255. Also, by calling the hotline number 1228 of the Coconut Research Institute and the phone number 1920 of the Gannoruwa National Agriculture Information Communication Center, anyone can get the information about the white fly damage.

The Coconut Cultivation Board also says that the Margosa oil mixture recommended for controlling white fly damage should be prepared using 10 ml of Margosa oil, 05 grams of soap powder, and 01 liter of water. (*Daily News*)

## **ENGAGING WORKSHOP STRENGTHENS COCONUT INDUSTRY HELD IN PAPUA NEW GUINEA**

The objective of the workshop was to fortify the Coconut Value Chain (CVC) by uniting key stakeholders, formalizing agreements, articulating commitments, and addressing challenges impeding the industry's growth.

The workshops convened processors, suppliers, financial institutions, and government representatives. They comprehensively discussed contractual agreements, finance facilities, and collaborative frameworks.

Attendees actively participated in sessions designed to foster deeper collaboration and understanding among stakeholders.

Following the workshops, a specialized SME Training session was conducted on March 5<sup>th</sup>. The session aimed to enhance participants' comprehension of the coconut value chain, improve their financial management skills, provide effective marketing strategies, educate them about sustainable practices, and explore export markets.

The initiative showcased a strategic effort towards nurturing sustainable growth and economic development within PNG's coconut industry.

The collaborative endeavors between the SPC and key stakeholders are poised to yield tangible outcomes, driving forward a resilient and interconnected Coconut Value Chain in the region. (*Loop*)

## **SPREAD OF LETHAL YELLOWING DISEASE IN COCONUT INDUSTRY REDUCED BY 70%**

Minister of Agriculture, Fisheries and Mining, Floyd Green, made the disclosure at the opening of the regional training workshop on Sustainable and Resilient Coconut Production within a Changing Climate, held at The Jamaica Pegasus hotel in New Kingston.

"Through the CIB, we have contributed significantly to the coconut industry through research, especially in mitigating the lethal yellowing disease. Our research in this area has allowed us to develop varieties and hybrids with optimum resistance/tolerance to lethal yellowing, which has been plaguing the coconut industry, causing severe economic losses in the industry," Green said.

"To this end, we have been able to reduce the spread of lethal yellowing by 70 percent. Additionally, we have been able to see increased yields through the varieties that we have developed and those that are adapting more to our local climatic conditions."

Within this region, lethal yellowing disease was first discovered in the Cayman Islands in 1834 and was found in Jamaica 50 years later, in 1884. It became a real threat to Jamaica after 1961 when it appeared in the Buff Bay area of Portland and became even more significant in the 1970s, when some 10 million 'Jamaica Talls' were destroyed.

The workshop is being held under phase two of the Alliances for Coconut Industry Development, Expansion and Enhanced Support in the Caribbean, a Regional Coconut Project.

During the event, the CIB will be facilitating technical sessions in areas such as establishment of coconut seed gardens; hybridization techniques, practices and processes; coconut field management and climate-smart production practices; processing for value addition; and ecotourism.

"The outcome that will be derived from the training is that our smallholder farmers, micro, small and medium-sized enterprises (MSMEs) and institutions from across Jamaica and the region will be thoroughly equipped and groomed in coconut production, value addition and trade," Green said.

Focus will also be placed on leveraging market linkages and investment into the sector, leading to further growth in the industry.

The minister further noted that the project has already had a significant impact in Jamaica and has contributed significantly to the objectives of Jamaica's National Coconut Sector Roadmap.

In his statement, he mentioned that the progress made was a result of the combined efforts of various entities. These entities include the Ministry of Agriculture, Fisheries and Mining, Caribbean Agricultural Research and Development Institute (CARDI), CIB, Scientific Research Council, JAMPRO, Alligator Head Foundation, Rural Agricultural Development Authority (RADA), Knockalva Polytechnic College (KPC), input providers, coconut companies, and farmers. "Through their collaborative efforts we have been able to convene a national stakeholders' platform for dialogue and brainstorming of solutions to issues facing our local coconut sector," Green said.

Activities such as facilitating the establishment of 30 lead farmer climate-smart demonstration plots for improving smallholder farmer capacity and market linkages for coconut and associated crops in St Catherine, St Thomas, St Mary, Portland, Hanover, Trelawny, and Westmoreland, with more than 300 second-ring farmers, have also been facilitated.

"We have been able to distribute over 100,000 intercrops, 30 black tanks, 10 irrigation systems, water pumps, fertilizers, and 75,000 coconut seedlings for the establishment of diversified plots," the minister said.

Additionally, training sessions were also held with more than 200 farmers, focusing on good agricultural practices, integrated management of major coconut pests, mother palm selection, nursery establishment and management, fertiliser management, and intercropping.

The Alliances for Coconut Industry Development, Expansion and Enhanced Support in the Caribbean, a Regional Coconut Project, is funded by the European Union (EU).

The project comprises 12 CARIFORUM countries and has been implemented through a partnership with CARDI, the International Trade Centre (ITC) and other important regional and national partners. (*The Gleaner*)

### **PCA PALAWAN PROVIDES TECHNICAL ASSISTANCE TO COCONUT FARMERS DURING EL NIÑO SEASON**

In order to mitigate the consequences of the peak El Niño season, the Philippine Coconut Authority (PCA) in Palawan assisted coconut growers in the mainland towns during the first quarter of 2024 through a number of intervention measures.

Senior Agriculturist for PCA Palawan Arlo Solano said that the PCA has taught in programs and applied mulching techniques to coconut farms in the mainland municipalities, in order to retain the moisture in the soil for their crops using farm wastes, coconut husks, and dried leaves.

"We assisted our coconut farmers to conserve soil moisture by application of mulching technology. There is also irrigation of coco plantation to help coconut trees experiencing water stress. These are the interventions we have done to our coconut farmers in the province.

Furthermore, Solano said that they helped those farmers with financial capacity to implement zero tillage or "no-till farming," a technique used to grow crops without disturbing the soil. They also encouraged these coconut farmers with applying salt fertilizers in their lands.

El Niño, a climate season characterized by extreme heatwaves that bring massive droughts, has been in effect in the Philippines since 2023.

Analiza Solis, head of the Climate Monitoring and Prediction of the Philippine Atmospheric Geophysical Astronomical Services Administration (PAGASA) noted that although the El Niño season "matured" this February

2024 and will start to wane, hotter months will come from March-May as they experience the peak impact of the heatwaves, droughts, and warming of the ocean and water basins.

Solis noted that this will affect more than 56 agricultural provinces nationwide as the extreme hot temperatures takes its toll on the land for three-to-five months, as some provinces were affected by a dry spell earlier than others.

PCA Palawan will keep running these programmes even after the peak season is over so that they can properly address any concerns from their area. "Actually, this activity is part of the extension activities of our agriculturists deployed in mainland municipalities of Palawan," Solano added. (*Palawan News*)

### **PLAN TO CULTIVATE 45,000 KING COCONUT PLANTS IN 86 VILLAGES**

The Coconut Cultivation Board has taken steps to prepare a program for the expansion of king coconut cultivation in Sri Lanka.

Accordingly, 86 villages have been identified as suitable areas for king coconut cultivation in the island.

A huge demand for Sri Lankan king coconut has been created in the international market and Sri Lanka has the monopoly on supplying the king coconut in the international market. The reason for this is that the taste and quality of king coconut in Sri Lanka is very high.

Also, although many countries have tried to grow king coconut, they have not been able to get the quality of king coconut in Sri Lanka. Therefore, the demand for king coconut in Sri Lanka is increasing daily.

A discussion on popularizing king coconut cultivation as a crop was held under the patronage of the Minister of Agriculture and Plantation Industries, Mr. Mahinda Amaraweera. Officers of Coconut Cultivation Board and

Coconut Development Authority as well as Coconut Research Institute also participated in the event.

Accordingly, 86 villages of the island were selected and it was decided to plant 45,000 king coconut plants in those villages. minister advised that if someone wants to grow more acres of king coconut in one village even though they are selected as villages, then steps should be taken to provide the necessary facilities for that.

Under this, king coconut seedlings and technical knowledge as well as advices will be provided free of charge.

Monaragala 03 villages, 01village in Matara, 08 villages in Kurunegala, 09 in Kuliapitiya, 08 in Kegalle, 09 in Gampaha, 10 in Kalutara, 09 in Maravila, 04 in Ratnapura, 08 in Hambantota, 02 in Anuradhapura, 02 in Trincomalee, 02 in Polonnaruwa, 02 in Ampara, 04 in Matale, 08 in Galle , 02 in Batticaloa, 03 in Jaffna, 04 in Kandy and 86 villages have been selected for the program.

Minister of Agriculture and Plantation Industry, Mr. Mahinda Amaraweera, who expressed his opinion, said that the demand for king coconut also have been increased due to the dry weather these days and the prices have also increased.

But by achieving export targets of king coconut, farmers can get more income and are also the researchers are advised to carry out new technical research to introduce king coconut juice in the market as a value-added product. *(Daily News)*

### **STARTUP MAKES NANOCARBON FOR BATTERIES FROM COCONUT SHELLS, BOOSTS EFFICIENCY BY 125%**

With rising fuel prices and the promise to deliver a green alternative to traditional combustion engines, the electronic vehicles (EV) market has already exploded in India in recent years.

However, the notion of sustainability on account of the environmental impact of manufacturing batteries and the energy source to power these batteries is still doubtful.

"As EVs and Renewable energy sources become more common, there's a growing demand for energy storage. This means more batteries are needed, which leads to increased mining for materials. This puts further strain on the planet as we extract more resources for battery production," Akshay Jain, co-founder of Cancrie stated.

To find an optimum solution, Akshay (36) along with his co-founder Mahi Singh (35) innovated nanocarbon for batteries from coconut shells. The patented technology is claimed to increase battery performance by 125 percent, thus reducing the need for raw material extraction for battery production.

"We are using waste to make nanocarbons, and by adding it as a component into the existing batteries, we are increasing their efficiencies. This reduces the need for mining of rare earth metals and makes the planet more sustainable," he adds.

### ***Extracting useful carbon from agri-waste***

Akshay and Mahi grew up together studying in the same school in Jaipur. In 2010, Akshay went on to pursue PhD in chemical engineering at the National University of Singapore. Two years later, Mahi also went to Singapore to pursue her master's at Nanyang Technological University.

It was during the same time that they started brainstorming about this technology.

"During this period, we tried to upcycle agricultural waste into fertilizers, low-cost fuels, and absorbents. After a year and a half of research, we achieved a major breakthrough by turning agri-waste into high-value nanocarbon for use in batteries. That marked a turning point for our project," says Akshay.

Mahi points out that "more people are adopting EVs, alongside a growing interest in adopting renewable solar energy, both of which rely on batteries. By speaking to various people, we understood that existing batteries, which are made with carbons derived from fossil fuels, face challenges related to lifespan, charging, warranty returns, and safety. We saw this as a huge plug-in for our innovation."

Akshay and Mahi decided to marry both concerns of growing agricultural waste and rising demand for batteries, and kill two birds with the same stone! In 2020, Akshay and Mahi launched their startup 'Cancrie' to commercialise their patented innovation.

Initially, they used 15 different varieties of waste — including coconut shells, coconut husks, fruit stones, paper waste, palm kernel shells, and human hair waste — to upcycle them into useful nanocarbons.

"But from a business perspective, we found coconut shells as the right precursor because of their commercial feasibility and their wide availability and abundance. These precursors possess certain properties like high carbon content, hardness levels, and ash content, which makes it a better choice," says Akshay.

After the thermal treatment of agricultural waste, the startup extracts black-coloured powder, known as nanocarbon. Compared to existing incumbent solutions used in batteries, it is claimed to have a better surface area, pore network, surface wettability, and functionalities — this enhances the electrochemical reactions on electrode plates at a molecular level in batteries.

### ***Enhancing battery efficiency and lifespan***

After safely conducting the BIS standard testing for batteries using their nanocarbon at an industrial scale, the startup commercialized their product to leading battery manufacturers in the country. Mahi informs that at least 3,500

batteries with Cancrie nanocarbon have made it to the domestic market in Delhi, and Navi Mumbai and Pune in Maharashtra.

Interestingly, these nanocarbons have proved to increase energy density for lithium-ion hybrid batteries by 125 percent. Explaining in simple words, Akshay says, "With this, any two-wheeler user can run the same vehicle for 225 kilometres instead of 100 kilometres because the range has gone up. If somebody is driving their two-wheelers at the speed of 40 to 50 kilometres per hour, with ours, they can run it at a much better speed of 60 to 70 kilometres per hour."

"We have other advantages for the lead acid batteries like household investors where our nanocarbon has proved to improve the life cycle of the battery. When such batteries are charged, a significant amount of electricity is lost in heat dissipation. Our material causes lesser internal resistance thereby storing a majority of the energy in the form of chemical energy. This translates into faster charging and improving the life cycle of batteries that use our nanocarbon," he adds.

Cancrie has observed higher capacity retention thereby showcasing higher life that can go up to 50 percent, thereby minimizing the losses due to warranty returns.

Kiran Chinchane, owner of Mumbai-based Laurus Batteries, has been using nanocarbon in the manufacturing of their lead-acid batteries for the past year and a half. "After incorporating their nanocarbon into our lead-acid batteries, we have successfully extended the lifecycle of our batteries by 20 to 25 percent. Laboratory tests indicate a reduction in warranty returns as well. Currently, we have replaced 20 percent of our batteries with their nanocarbon component, and I aim to integrate it into all our batteries in the future."

Meanwhile, Amitej, head of product development at Cancrie, tells "As the performance and the life cycle of the batteries have gone up, you don't need to manufacture

more batteries than what was needed to meet the rising energy requirements. This will also cause lower CO<sub>2</sub> and GHG (greenhouse gas) emissions. By 2050, we would be annually reducing four Giga tonnes of CO<sub>2</sub> emissions by simply switching the material."

In 2023, Cancrie was also awarded the National Energy Efficiency Innovation award by the Bureau of Energy Efficiency, Ministry of Power.

Personally, this journey has been extremely fulfilling, shares Akshay. "When I started this work, I was not sure how it would turn out. It requires a lot of patience as it takes years to reap the fruits. We have built nanocarbon from scratch and above all, from waste. It took us almost 10 to 12 years before we started selling. It gives me immense contentment that we have brought this product to such a level," he adds. *(The Better India)*

### **SUBANG JAYA CITY COUNCIL SETS UP MANAGEMENT CENTRE TO PROCESS COCONUT WASTE**

Subang Jaya City Council (MBSJ) has come up with the first coconut waste management centre in Selangor.

Waste Eco Park MBSJ would ensure coconut waste from traders was managed systematically while also reducing the amount of coconut waste sent to landfills, MBSJ's Corporate and Strategic Management Department said in a statement.

"Licensed coconut traders will send their coconut waste to be processed here. As of December 2023, we have 19 traders who have paid for scheduled coconut waste collection.

"Collection is done twice a week. Traders also have the option of dropping off coconut waste themselves on weekdays during office hours."

Waste Eco Park MBSJ sits on a 0.53 ha site at Jalan TS 6/10 in Taman Industri Subang.

During an open day to introduce the centre, Subang Jaya mayor Datuk Mohd Fauzi Mohd Yatim and other guests witnessed a demonstration of a coconut waste decomposition machine.

There were also demonstrations on use of cocopeat and cocofibre products, composting and recycling, as well as briefings by MBSJ's Environmental Management Department and Selangor Agriculture Department, and sale of MBSJ's organic products.

"The value-add from this project is production of cocopeat and cocofibre products from coconut waste collected from traders around the city, including Subang Jaya, Puchong, Putra Heights and Seri Kembangan," the statement read.

"Cocofibre can be used as mulching for potted plants and is effective for controlling weed growth and maintaining soil moisture. Cocopeat is ideal as a planting medium."

As of December, Waste Eco Park MBSJ has collected 483,699 kg in coconut waste and produced 35,789 kg coco fibre and 6,784 kg cocopeat products.

MBSJ is targeting a 30% increase in recycling of coconut waste at the centre by 2030. *(The Star)*

### **PROMOTING ACCESS TO FINANCE FOR SMES IN COCONUT INDUSTRY**

The Kokonas Industri Koporesen (KIK) has signed a memorandum of understanding (MoU) with Credit Guarantee Corporation Limited to provide credit guarantee for micro and small medium enterprises in the coconut industry.

KIK is the regulatory body of the coconut industry in Papua New Guinea (PNG), and Credit Guarantee Corporation Limited (CGC) is the new entity set up to provide guarantee to facilitate access to finance for Micro and Small Medium Enterprise (MSMEs).

The two organizations have joined forces to promote access to finance for processors of high-value coconut products.

Under this partnership, KIK and CGC PNG will collaborate on various initiatives to support the growth and sustainability of the coconut industry in Papua New Guinea by leveraging their respective expertise and resources.

The two organizations will endeavor to address challenges related to access to finance and provide tailored solutions that meet the needs of coconut businesses across the coconut value chain.

KIK Managing Director, Alan Aku said the signing of the MoU with CGC is an important milestone for KIK.

He said KIK started its SME programs in 2016 and they started with six SMEs, and currently, KIK has 36 SMEs.

"Over the years, the SME sector in the coconut industry has grown, and our SMEs have produced a lot of products such as coconut oil and soap, and we want to take them down to other high-value-added coconut products.

"So we had this program since 2016. And we have had our SMEs struggle to get credit (loan) from financial institutions, but just last year the Pacific community has come onboard in partnership with us to create products for our SMEs to access financial assistance from financial institutions.

"In the process we came across CGC to facilitate this process and we approached CGC and they also agreed to partner with us," Mr. Aku said.

He said KIK will be the first commodity board to sign with CGC to pave the way for SMEs in their industry to have access to financial assistance.

CGC Chief Executive Officer, Dominic Sikakau, emphasised the importance of the partnership in facilitating access to finance for processors

of high-value coconut products and said they are excited to partner with KIK to provide financial solutions through their partner financial institutions to enable coconut businesses to thrive and succeed in today's competitive market.

"Together, we can make a positive impact on our historic industry and drive economic growth in PNG," he said. *(Post Courier)*

## TRADE NEWS

### INDUSTRY PERSPECTIVE

The vegetable oils market continued firm tracking palm oil gains.

Coconut oil in Rotterdam market remained untraded this week for the second week running. The market continued firm during the week influenced by gains in palm oil. Opening quotes were mostly firm at \$1,250-1,285/MT for positions from March/April through to September/October and continued to head upward on the firm vegetable oils market. Closing values, however, were mixed with second quarter positions generally steady to easier influenced by lower palm oil values while deferred contracts were firm. Levels stood at \$1,300-1,330/MT CIF.

The palm kernel oil market, by contrast, continued to see action, though activity slowed during the week, with only two trades reported, both done at \$1,180/MT CIF. This week's paying level surpassed last week's \$1,035-1,105/MT CIF. The market started off firmer, saving for two positions with offers at \$1,115-1,155/MT CIF for positions from March/April through to November/December and showed a similar price trend as coconut oil. At close, prices ranged at \$1,177.50-1,195.00/MT CIF.

The price premium of coconut oil over palm kernel oil this week further narrowed

substantially across all positions from respective levels a week ago. This week's average at \$126.61/MT significantly contracted from \$156.76 in the preceding week. Premium per position are shown following: March/April \$79.38 (\$159.55 last week); April/May \$113.50 (\$148.25); May/June \$118.50 (\$146.20); June/July \$129.25 (\$149.75); July/August \$128.75 (\$155.10); August/September \$133.75 (\$165.50); September/October \$154.50 (\$173.00); October/November \$155.25 (new position).

At the CBOT soya complex market, soybean futures initially stood at the downside pressured by increased global supply but promptly reversed on short covering amid CONAB report indicating reduction in projections for Brazilian soybean. The latest WASDE report did not have significant changes from February, thus maintaining a steady to firm market. Except for profit-taking seen on Thursday, the market remained on the upside until the close. Soybean oil was the strongest segment in the complex.

At the palm oil section, the market tracked higher this week although by week's end dived into a technical correction. This week's market was supported by seasonally low production, strong exports, and reduced stocks in Malaysia.

The MPOB data showed Malaysian palm oil production dropped in February to 1.26 million MT from prior month level of 1.40 million MT, a 10-month low; stocks fell for the first time in 7 months to below 2 million MT at 1.92 million MT. Gains also were driven by demand for the Ramadan and Eid festivities in the coming months and higher soybean oil and crude mineral oil prices.

Prices of tropical oils this week for nearest forward shipment rose again for the third week running from last week and again led by palm kernel oil which leaped \$122.50 from \$1,070.00 last week to \$1,192.50/MT CIF this week. Palm oil followed with an increment of \$80 from \$1,006 to \$1,086/MT CIF. Coconut oil climbed by \$42.33 from \$1,229.55 to \$1,271.88/MT CIF. Thus, coconut oil radically reduced its price premium

over palm kernel oil and palm oil. Against palm kernel oil, the spread further tightened from \$159.55 last week to \$79.38/MT currently, and against palm oil a contraction from \$223.55 to \$185.88/MT. (*UCAP Bulletin*)

## MARKET ROUND-UP OF COCONUT OIL

In Rotterdam, the coconut oil market continued quiet. Participations from buyers remained extremely lacking. The market though continued firm and closed with sellers offering \$1,300 for April/May; \$1,300 for May/June; \$1,315 for June/July; \$1,320 for July/August; \$1,325 for August/September; \$1,330 for September/October; and \$1,335/MT CIF for October/November. Except for midweek's bids that surfaced at \$1,235 for May/June and \$1,200 for June/July, the week was unbid for all positions.

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

## PANGILINAN'S METRO PACIFIC PURSUING ANOTHER ACQUISITION IN COCONUT SECTOR AFTER AXELUM INVESTMENT

Metro Pacific Investments Corp. (MPIC), fresh off its P5.32 billion investment in Axelum Resources Corp., is eyeing another acquisition in the coconut industry.

MPIC chairman and CEO Manny V. Pangilinan, during a press briefing, emphasized the need for industry consolidation to address pressing challenges and ensure long-term sustainability.

"We're looking at one in particular," Pangilinan said in response to a query regarding potential acquisitions aimed at strengthening the Philippines' position in the global coconut market.

While acknowledging the numerous difficulties faced by the Philippine coconut industry, Pangilinan emphasized its immense potential for growth and revitalization.

A key concern highlighted by Pangilinan is the aging coconut tree population, which hinders the sector's ability to meet the rising global demand for coconuts and their various by-products.

He identified coconuts as a prime Philippine agricultural product with the potential to become a dominant player in the international market.

Pangilinan pointed to the global rise in coconut consumption, emphasizing the Philippines' and Indonesia's position as leading producers. He further noted the Philippines' current lead in terms of production capacity.

However, Pangilinan expressed concern over the underutilization of existing processing facilities and the aging coconut trees at the farm level.

He stressed the need to address these issues and called for the development of a strong brand to elevate the industry's image.

"Hopefully a branded product in the rest of the world," Pangilinan said, referring to the international market's significant contribution to Axelum's sales.

"There are not too many countries in the world that actually produce large quantities of coconuts as nuts and by-products. It's primarily us and Indonesia, and we are currently ahead of them in terms of production," Pangilinan said.

Last month, MPIC's agriculture division acquired a 34.75% ownership stake in Axelum, with the aim of bolstering the coconut company's growth trajectory in both production and export ventures.

Situated primarily in Misamis Oriental, Axelum's principal manufacturing facility harnesses the entirety of the coconut, crafting a diverse range of products including coconut water, desiccated coconuts, coconut milk powder, coconut milk/cream, reduced-fat coconut, sweetened coconut, and coconut oil. (*Bilyonaryo*)

## COCONUT INDUSTRY STAKEHOLDERS URGED TO CAPITALISE ON NICHE MARKETS

Players in the local coconut industry are being encouraged to do more to take advantage of high-value niche markets.

Deputy Programme Manager at the Caribbean Agricultural Research and Development Institute (CARDI), Tristan Alvarez, who was speaking with JIS News recently, noted that currently, stakeholders focus on coconut water, oil and desiccated coconut [dried and grated meat], but there are other opportunities to earn from value-added production.

He suggested that people look beyond the food market to prospects in the cosmetic industry, noting that there is also a demand for items such as activated coconut charcoal and tree trunks, husks, and shells.

Alvarez said that stakeholders in the sector could also capitalize on the need for biodegradable materials.

"The European Union has moved away from single use plastics. A lot of countries around the region have been looking at that from a policy perspective. Those retail products that you would get when you buy food – the knives, forks, spoons and Styrofoam or plastic food receptacles – are a great opportunity for us to repurpose coconut and agricultural waste for use in our retail/food markets or industries," he pointed out.

Noting that start-up costs often deter agroprocessors from entering niche markets, Alvarez said stakeholders should view this as an investment that will pay off in the future.

"What we find in the region is that we focus on the raw material. We need to go beyond and see how we can innovate, be creative and develop a diverse range of products to serve different sectors. The manufacturing industry doesn't only speak to what we bring in and sell, but what we could create as a people," he noted.

"I think this is the shift that we could make and you'll find that there are niche players in the industry who have been utilizing creative solutions. We now need to build that capacity and look at ways that we could incorporate the technologies that would allow us to achieve things at scale," Alvarez added. *(Jamaica Observer)*

### **MIC EXPLORES INVESTMENTS IN COCONUT OIL MILLS, REFINERIES**

The Maharlika Investment Corp. (MIC) is looking into investing in the agro-industries sector, specifically coconut oil mills and refineries.

"The MIC Board approved discussions with the Department of Finance-Privatization Management Office to explore investment opportunities in government assets, particularly in coconut oil mills and refineries," it said in a statement over the weekend.

In a Viber message, MIC Chief Executive Officer and President Rafael D. Consing, Jr. said the corporation is "seeking to identify strategic opportunities within the agri sector."

No other details were provided.

"Proceeds of the Coco Levy Trust fund go to programs for farmers, an investment in line with the government's socioeconomic development program," the MIC said.

In 2021, then-President Rodrigo R. Duterte signed Republic Act No. 11521 or the Coconut Farmers and Industry Trust Fund Act.

The law puts coconut levy assets into a trust fund that finances rehabilitation and modernization projects for the coconut industry.

Data from the Philippine Statistics Authority showed that the value of coconut oil exports jumped by 26.9% to \$138.17 million in January from \$108.92 million in the same month a year ago.

According to the Agriculture Department, around 80% of the country's total coconut production is processed into copra, the feedstock for coconut oil mills.

However, the average annual capacity utilization rate of the coconut oil mills from 2009 to 2013 was only recorded at 49.8%.

Meanwhile, Danilo V. Fausto, president of the Philippine Chamber of Agriculture and Food, Inc., said that the sovereign wealth fund's interest in investing in coconut oil mills and refineries is a welcome move.

"I think we have several coconut oil mills which are part of the assets of the coconut levy funds. They are supposed to be liquidated within five years from the date the law was passed," he said in a Viber message.

"We need these coconut mills, whether public or private, to increase our share of the export market for coconut products. The Maharlika fund is a good outlet for liquidating these assets so that coconut farmers could benefit from the proceeds of sale," he added.

On the other hand, Samahang Industriya ng Agrikultura Executive Director Jayson H. Cainglet said that the MIC's "big business approach" is unlikely to prioritize coconut farmers.

"Value-adding economic activity should be at the farm level. We'd rather see public investments in coconut processing so that farmers can benefit," he said in a Viber message.

"Promoting value chain development with the farmers having a central role from supply to processing and marketing would ensure that they are able to capture the bigger share of the pie," he added.

He cited the production of virgin coconut oil, edible oil, coconut water, charcoal briquette and other value-added products that farmers can produce.

The MIC earlier identified its priority sectors such as energy, physical and digital infrastructure, food security, aviation and aerospace, mineral processing, transportation and tourism.

Earlier this month, Mr. Consing said that the MIC is seeking to raise \$1 billion for energy projects. The bulk of its initial investments will be focused on energy, he said.

The MIC has an authorized capital stock of P500 billion. (*Business World*)

the Palm & Lauric Oils Price Outlook Conference in Kuala Lumpur this week.

Production in top grower Indonesia may fall by at least a million tons in 2024, while Malaysian output could remain flat, said Mistry. The trend is likely to last at least five years, as the industry contends with aging trees, erratic weather, and little improvement in farming practices, he said in an interview at the sidelines of the Conference. While production of other oilseeds is set to climb this year, "palm oil is unfortunately the laggard," he said. (*UCAP Bulletin*)

## OTHER VEGEOIL NEWS

### INDONESIA SEEKS TO INTERCROP RICE ON OIL PALM PLANTATIONS

The agriculture ministry has asked the Indonesian Palm Oil Association (GAPKI) to help the government in realizing food resilience by planting rice with intercropping system in smallholders' oil palm plantation areas subject to replanting program, said GAPKI Chairman Eddy Martono during a celebration ceremony of the 43<sup>rd</sup> anniversary of GAPKI.

The kind of rice to be planted under the program is locally known as "Gogo", a superior variety of rice (*Oryza Sativa L*) which can be planted on dry fields, instead of irrigated rice fields. Eddy said initially the scheme will be implemented by GAPKI in South Kalimantan and later to be expanded to other provinces. Currently, GAPKI groups 739 oil palm plantation companies with total area of 3.7 million hectares in 15 provincial branches. (*UCAP Bulletin*)

### PALM OIL SUPPLY CONCERNS TO LIFT PRICES THIS YEAR

Stagnating production and dwindling stockpiles will underpin palm oil prices relative to other edible oils in the near term, according to Dorab Mistry, director at Godrej International Ltd. at

### INDONESIA, MALAYSIA ASK EU TO DELAY IMPLEMENTATION OF EUDR FOR 2026

The governments of Indonesia and Malaysia have asked European Union (EU) to delay the implementation of its European Union Deforestation-free Regulation (EUDR) until 2026, instead of the initial schedule of January 2025, Indonesian Palm Oil Association (GAPKI) Chairman Eddy Martono said during a press conference on the performance of palm oil industry in 2023 and its prospects for 2024 in Jakarta last February 27. The proposal had been presented to the EU during the second meeting of Ad Hoc Joint Task Force on EUDR, which was conducted on February 02 in Putrajaya, Malaysia.

According to Eddy, the reasons behind the proposal to delay are mainly the fact that smallholders in Indonesia and Malaysia are not yet ready for the EUDR application. Thus, earlier implementation will only threaten the continuity of smallholder's plantation businesses.

Another reason is to avoid benchmarking as a country with a high risk. Based on the EUDR, EU will apply the benchmarking system of exporting countries based on three risk levels, namely high risk, medium risk, and low risk. The EUDR categorizes Indonesia as high risk, which would harm Indonesia's export commodities like palm oil, cocoa, coffee, soybean, beef, woods, rubber, paper, and leather. (*UCAP Bulletin*)

## MALAYSIAN PALM OIL MARKET EXPECTED TO REMAIN POSITIVE

Malaysian Plantation and Commodities Minister Datuk Seri Johari Abdul Ghani expects the country's palm oil market to remain positive this year, citing demand from top export destinations such as India, China, and the European Union, with respective market shares at 17.4 percent, 9.1 percent, and 7.4 percent. He said the demand is further supported by the interest in replenishing stocks to ensure food security and the overall viability of business activities.

The Malaysian Palm Oil Board (MPOB) estimates that crude palm oil (CPO) production in 2024 to reach 18.75 million MT as against 18.55 million MT in 2023. "This marginal production increase of about one percent compared to 2023 will be driven by improved labor market conditions and a higher number of oil palm trees maturing," he said in his keynote address at the 35<sup>th</sup> Palm and Lauric Oils Price Outlook Conference and Exhibition (POC2024) earlier this week in Kuala Lumpur.

He said, to realize the positive estimates for this year, it is crucial to act swiftly and address key challenges in the industry, namely, managing the negative perceptions against palm oil, the sizable opportunity loss arising from inefficient smallholders, climate change (El Niño) and labor issues. (*UCAP Bulletin*)

## HEALTH NEWS

### KNOW MORE ABOUT MCT OIL

Medium-chain triglycerides, or "MCTs" are a type of saturated fatty acid. They are also occasionally referred to as medium-chain fatty acids, or "MCFAs." Fatty acids can be obtained pure from MCT oil.

The elongated chemical structure of MCTs is the source of their name. The building blocks

of all fatty acids are linked chains of carbon and hydrogen..

Fats are categorized by how many carbons they have: Short-chain fats (like butyric acid) have fewer than six carbons, medium-chain fats have between six to 12 carbons and long-chain fats (like omega-3s) have between 13–21.

Compared to longer-chain fatty acids, MCTs are absorbed more easily since the body has less work to do breaking apart carbon bonds. They are also smaller, so they can permeate cell membranes more easily and don't require special enzymes for our bodies to utilize them.

What does MCT oil do to make it a top source of healthy fats? Medium-chain fats are digested easily and sent directly to your liver, where they have a thermogenic effect and the ability to alter your metabolism positively.

This is one reason why many people say that MCTs, including coconut oil, are burned by the body for energy or "fuel" instead of being stored as body fat.

Actually, there are a few variations on MCTs, some of which are probably more successful than others. The four types of MCTs are as follows:

- caproic acid (C6)
- caprylic acid (C8)
- capric acid (C10)
- lauric acid (C12)

Generally speaking, the shorter the chain (meaning the lower the number of carbons the acid has), the faster the body can turn the fatty acids into usable energy, in ketone form. Ketones are what the body produces when it's using fat for energy instead of glucose, such as when someone is following the keto diet.

Regardless of the exact kind of MCT, all are still beneficial for overall health — especially for people who have a difficult time digesting other forms of fats, including anyone with conditions

tied to malabsorption problems, digestive disorders like leaky gut syndrome, Crohn's disease, gallbladder infections and so on.

Traditional populations living in tropical areas have been consuming saturated fats, including sources of MCTs like coconuts, for thousands of years without any ill effects — so consider the idea that a low-fat diet is "healthy" to be one of the biggest nutrition lies there ever was.

What is MCT oil used for? Below are some of its benefits and why people choose to supplement with it.

### **1. Can Help with Weight Loss/Maintenance**

MCTs show promise in enhancing energy expenditure, promoting fat burning, and aiding in weight loss when included as part of a balanced diet. While not every study confirms a direct link between MCT oil consumption and weight reduction, some research, such as a 2003 study in the Journal of Obesity, suggests significant benefits. This study found that replacing long-chain triglycerides with MCTs in a targeted diet helped prevent long-term weight gain by increasing energy expenditure and fat oxidation. Additionally, a 2015 meta-analysis of randomized controlled trials observed greater decreases in body weight and fat in groups consuming medium-chain fats compared to long-chain fats. Experimental studies suggest that MCTs suppress fat deposition by enhancing thermogenesis and fat oxidation, potentially aiding in weight loss without the need for extreme carbohydrate restriction. Therefore, incorporating MCT oil into your diet may offer benefits similar to the ketogenic diet by promoting ketone production and providing a rapid source of energy, making it a valuable addition for those following a keto or Paleo diet.

### **2. Promotes Heart Health Protection**

What are the benefits of MCT oil when it comes to cardiovascular health? A 2010 study published in the Journal of Nutraceuticals and Functional Foods reported that MCTs can help prevent the development of metabolic syndrome — a term given to a cluster of conditions including metabolic

disorders such as abdominal obesity, dyslipidemia, hypertension and impaired fasting glucose levels.

Another 2018 study concluded that MCTs showed more protective effects on cardiovascular health in rats that fed a high-fat diet compared to LCTs. It's thought this was due to MCTs improving serum lipid profiles and reducing hepatic total cholesterol.

MCTs seem to be able to help decrease cardiovascular disease and mortality risk in general due to helping lower odds of becoming obese. Most likely, they have this positive effect because they are anti-inflammatory, easy to digest, satiating and easily used for energy, as described above.

### **3. Boost Energy Levels, Mood and Performance**

Medium-chain fats play a crucial role in brain health, providing a readily available source of fuel for optimal cognitive function and mental clarity. Particularly beneficial for those on low-carb diets like keto, these fats aid in reducing adverse effects of keto-induction and expediting the transition to ketosis. Studies suggest that MCTs may also enhance memory and cognitive function, with potential benefits for individuals with conditions like Alzheimer's disease. Furthermore, MCTs support exercise performance, making them a versatile addition to a healthy lifestyle. Whether you're looking to boost brain function, enhance exercise performance, or simply feel more energized and focused, incorporating MCTs into your diet can offer numerous benefits for overall well-being.

### **4. Supports Digestion and Nutrient Absorption**

MCT oil and coconut oil both help to balance the bacteria in the gut microbiome, which helps with energy expenditure, gastrointestinal symptoms, and the body's capacity to absorb vitamins and minerals from meals.

Medium-chain fats can help kill a wide range of pathogenic viruses, strains and bacteria that cause digestive issues, including candida,

constipation, diarrhea, food poisoning, stomachaches and so on.

You also need to consume fatty acids in order absorb certain vitamins and nutrients found in various foods. These include nutrients like beta-carotene (a precursor of vitamin A found in plants like berries, squash and leafy greens), vitamin E, calcium, magnesium, phosphorus and lutein.

### **5. Contains Antibacterial, Antiviral, Antifungal and Anti-Inflammatory Properties**

MCTs possess natural antimicrobial properties, making them effective in combating harmful bacteria in the gut without disrupting beneficial bacteria. Known to target various strains responsible for infections like strep throat, pneumonia, food poisoning, and urinary tract infections, MCTs offer superior protection compared to longer-chain fatty acids. Research suggests that medium-chain lipids added to milk and formula can deactivate pathogens such as respiratory syncytial virus and herpes simplex virus type 1. Moreover, MCT oil aids in controlling inflammatory responses by modulating mitochondria activity, leading to the downregulation of pro-inflammatory cytokines and elevation of anti-inflammatory cytokines.

### **6. Able to Handle Cooking at High-Heat**

MCT oils are particularly good for cooking because they have a high "smoke point," meaning they don't oxidize from heat easily. This is important, because certain cooking oils are not well-suited for high-temperature cooking (like extra virgin olive oil or flaxseed oil, for example) and can become rancid oils somewhat easily.

MCT oil can be used for the most part in baked goods, sautés, stir-fries and grilled foods without oxidizing. (Dr. Axe)

## **WHAT IS THE DIFFERENCE BETWEEN MCT OIL AND COCONUT OIL?**

Is MCT oil the same as coconut oil? Coconut oil provides not only MCTs (especially abundant

levels of lauric acid), but also antibacterial properties, antioxidants, anti-inflammatories and more.

The main difference is that MCT oil is much more concentrated and contains mostly capric and caprylic acids.

Coconut oil is one source of MCTs, but it also contains other types of fatty acids besides MCTs. While coconut oil certainly has MCTs in it, concentrated MCT oil is almost entirely MCTs.

- There are four different kinds of MCTs, which differ depending on the number of carbons that are connected to the fat molecules (This ranges between six to 12 carbons long).
- The MCTs in coconut oil are made up of about 50 percent of one kind (lauric acid) but typically contain the other three in varying amounts.
- MCT oil, on the other hand, is produced using fatty acids extracted from coconut and palm oil and is usually composed of capric acid, caprylic acid or a blend of both.
- Coconut oil is one of the best sources of lauric acid. Although about 90 percent of the fats found in coconut oil are saturated, a high percentage is not the very short-chain MCTs, which have fewer carbons (Lauric acid has 12).

The fatty acids termed MCTs and lauric acid act somewhat differently in the body, although in the U.S., coconut oil and MCT oil manufacturers are legally allowed to claim that lauric acid is a type of MCT.

Some people say that lauric acid doesn't biologically act like other forms of shorter MCTs (or at least as quickly), which is one reason why MCT advocates believe that MCT oil is somewhat superior.

On the other hand, coconut oil does have some well-documented health benefits that concentrated MCT oils might lack. The biggest drawback to buying manufactured MCT

oil is that you might not really know what you're getting.

In order to produce a liquid MCT oil that does not become solid at colder temps, it might need to be more refined than regular coconut oil. Most MCT oils on the market are manufactured via chemical/solvent refining, which can mean they require using chemicals like hexane and different enzymes and combustion chemicals. (Dr. Axe)

## COCONUT RECIPE

### COCONUT NOODLE SOUP

#### Soup:

- Kosher salt
- 1 (14-ounce) can full-fat coconut milk
- 2 cups water
- 4 large shallots, thinly sliced crosswise (2 cups)
- 15 fresh curry leaves (1 inch or longer), thinly sliced crosswise (optional but ideal)
- 1 to 2 serranos or jalapeños, split lengthwise, with tops intact
- $\frac{3}{4}$  teaspoon ground turmeric
- $\frac{1}{4}$  teaspoon cayenne
- 1 teaspoon fine sea salt
- 5 ounces baby spinach or regular spinach, tough stems removed and discarded, leaves coarsely chopped
- 1 teaspoon fresh lime juice
- 8 ounces medium-width rice noodles, such as pad Thai-style

#### Tarka:

- 1 tablespoon neutral oil
- 1 teaspoon brown or black mustard seeds
- $\frac{1}{4}$  teaspoon dried red chili flakes

**Toppings:** Bean sprouts, Cilantro leaves and tender stems, Lime wedges, Chili sauce

#### Directions:

1. Bring a large pot of salted water to a boil to use later for the noodles. Keep it warm as you prepare the rest of the soup.
2. Make the soup: In a 4-quart saucepan or stockpot, combine the coconut milk, water, shallots, curry leaves, green chilies, turmeric, cayenne, and salt and simmer over medium-low heat until it thickens to the consistency of light cream, about 10 minutes. Avoid a hard-boil or the coconut milk will separate. Stir in the spinach and simmer 3 to 5 minutes, or until wilted. Add the lime juice and remove from the heat.
3. Make the tarka: Assemble your prepped and measured ingredients by the stove. In a small skillet, heat the oil over medium-high heat. Add the mustard seeds and heat until they pop for a few seconds, occasionally swirling the pan. Add the red chili flakes and sizzle for a few seconds, then pour the entire mixture over the soup and stir it in. Cover and keep warm.
4. Return the warm water to a rolling boil and add the noodles. Cook until tender, 5 to 7 minutes, then drain and briefly rinse. Divide the noodles among four bowls and spoon the soup equally over the noodles. Top with bean sprouts and cilantro leaves, and serve with lime wedges and chili sauce on the side.

*(Wisconsin Public Radio)*

## 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      | 38,556         | 38,844         | 41,765         | 5,273          | 7,395          | 7,791          | 709          | 930           | 767          |
| February     | 36,791         | 38,203         | 16,263         | 6,230          | 10,228         | 8,685          | 1,045        | 943           | 882          |
| March        | 40,634         | 43,683         | 18,497         | 10,382         | 11,694         | 11,823         | 882          | 1,050         | 348          |
| April        | 42,325         | 45,463         | 13,261         | 8,979          | 9,429          | 11,516         | 548          | 1,576         | 416          |
| May          | 25,660         | 29,854         | 20,163         | 9,457          | 6,739          | 10,443         | 991          | 1,211         | 810          |
| June         | 29,232         | 42,901         | 19,479         | 9,182          | 10,517         | 8,167          | 412          | 1,475         | 792          |
| July         | 26,862         | 37,230         | 20,367         | 9,439          | 9,986          | 7,682          | 733          | 1,398         | 892          |
| August       | 28,654         | 41,983         | 18,639         | 10,071         | 10,438         | 7,880          | 489          | 1,670         | 1,044        |
| September    | 40,552         | 40,810         | 18,085         | 13,049         | 10,805         | 11,603         | 484          | 1,378         | 1,355        |
| October      | 31,781         | 46,811         | 21,164         | 9,390          | 9,181          | 12,369         | 547          | 606           | 841          |
| November     | 40,391         | 42,999         | 19,632         | 12,311         | 9,010          | 10,440         | 818          | 659           | 764          |
| December     | 51,289         | 47,597         | 18,280         | 10,047         | 8,268          | 10,826         | 697          | 1,214         | 1,063        |
| <b>TOTAL</b> | <b>432,727</b> | <b>496,378</b> | <b>245,594</b> | <b>113,810</b> | <b>113,690</b> | <b>119,226</b> | <b>8,355</b> | <b>14,110</b> | <b>9,974</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         | 19,865        | 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         | 5,140         | 3,752         | 4,025         | 5,034         | 4,422         |
| August       | 1,550         | 2,251         | 1,786         | 5,385         | 7,789         | 4,185         | 3,805         | 4,890         | 4,231         |
| September    | 1,799         | 2,020         | 1,797         | 6,876         | 7,246         | 5,543         | 4,435         | 5,376         | 4,317         |
| October      | 1,607         | 2,009         | 1,575         | 6,030         | 5,768         | 3,892         | 4,555         | 5,276         | 4,303         |
| November     | 2,348         | 1,946         | 1,312         | 6,450         | 4,963         | 4,159         | 4,650         | 3,720         | 4,089         |
| December     | 2,280         | 2,200         | 1,700         | 5,760         | 6,215         | 4,754         | 5,336         | 3,870         | 4,509         |
| <b>TOTAL</b> | <b>23,812</b> | <b>25,832</b> | <b>18,793</b> | <b>73,840</b> | <b>90,092</b> | <b>58,996</b> | <b>52,719</b> | <b>54,830</b> | <b>51,539</b> |

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

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

| India                  |                |                  | Indonesia              |               |                  |
|------------------------|----------------|------------------|------------------------|---------------|------------------|
| Country of Destination | Volume (MT)    | Value (US\$ 000) | Country of Destination | Volume (MT)   | Value (US\$ 000) |
| 1. USA                 | 19,858         | 38,860           | 1. CHINA               | 5,181         | 7,462            |
| 2. GERMANY             | 8,860          | 15,100           | 2. JAPAN               | 4,980         | 4,392            |
| 3. TURKEY              | 8,503          | 12,020           | 3. AUSTRALIA           | 2,156         | 4,753            |
| 4. SRI LANKA DSR       | 6,834          | 12,280           | 4. GERMANY             | 1,769         | 3,597            |
| 5. RUSSIA              | 6,469          | 12,580           | 5. TAIWAN              | 1,719         | 3,188            |
| 6. JAPAN               | 6,126          | 10,930           | 6. UNITED STATES       | 909           | 1,628            |
| 7. BELGIUM             | 6,108          | 12,150           | 7. NETHERLANDS         | 561           | 998              |
| 8. ITALY               | 5,129          | 7,340            | 8. KOREA, RP.          | 368           | 591              |
| 9. KOREA RP            | 3,674          | 7,530            | 9. SRI LANKA           | 265           | 354              |
| 10. U ARAB EMTS        | 3,557          | 6,130            | 10. MALAYSIA           | 220           | 305              |
| 11. OTHERS             | 66,743         | 107,290          | 11. OTHERS             | 665           | 1,166            |
| <b>Total</b>           | <b>141,861</b> | <b>242,210</b>   | <b>Total</b>           | <b>18,793</b> | <b>28,434</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          |                | 2023          |                |
|--------------|---------------|----------------|---------------|----------------|---------------|----------------|
|              | Volume (MT)   | Value US\$'000 | Volume (MT)   | Value US\$'000 | Volume (MT)   | Value US\$'000 |
| January      | 4,475         | 9,034          | 4,365         | 11,919         | 5,104         | 12,606         |
| February     | 3,417         | 7,333          | 3,733         | 8,962          | 2,817         | 7,405          |
| March        | 4,296         | 9,602          | 5,178         | 13,039         | 3,859         | 9,996          |
| April        | 3,155         | 6,673          | 5,081         | 12,464         | 3,452         | 8,587          |
| May          | 3,768         | 8,715          | 6,063         | 15,411         | 3,418         | 9,131          |
| June         | 4,226         | 9,569          | 6,422         | 16,331         | 4,269         | 9,581          |
| July         | 4,130         | 10,727         | 5,446         | 13,609         | 4,420         | 8,947          |
| August       | 3,316         | 8,017          | 6,315         | 14,927         | 4,210         | 8,453          |
| September    | 3,165         | 7,855          | 7,126         | 16,857         | 3,420         | 7,334          |
| October      | 2,950         | 6,881          | 6,600         | 15,938         | 5,209         | 11,393         |
| November     | 4,470         | 11,197         | 5,495         | 13,325         | 3,456         | 7,596          |
| December     | 4,353         | 12,074         | 4,645         | 12,082         | 3,028         | 6,329          |
| <b>Total</b> | <b>45,723</b> | <b>107,677</b> | <b>66,470</b> | <b>164,864</b> | <b>46,663</b> | <b>107,359</b> |

Source: U.S. Census Bureau

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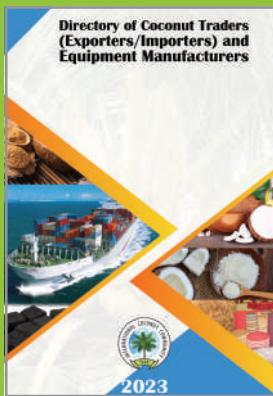
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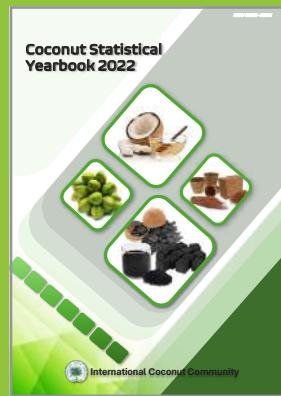
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# WORLD COCONUT DAY

*Competition*

# 2024

Coconut for a Circular Economy:  
Building Partnerships for Maximum Value

## PHOTOGRAPHY



## SHORT VIDEO



## WRITING



## TOTAL PRIZE

**US\$ 1,600**

**Submission End-Date**

16 September 2024

**Winner Announcement**

4 October 2024

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



# TERMS & CONDITIONS

- Theme: **"Coconut for a Circular Economy: Building Partnerships for Maximum Value"**
- 1<sup>st</sup> - 3<sup>rd</sup> winner by decision of jury
- The decision of the jury is final and inviolable
- Participants must follow ICC social media
- Submission email to: [wcd@coconutcommunity.org](mailto:wcd@coconutcommunity.org)



**TOTAL PRIZE  
USD500**

## Photography Competition

- Photos must be original work of the participant
- Time range photos taken is year 2023 until now
- Minimum resolution: 600 DPI
- Maximum of 5 photos per participant
- Name format: Country - Name - Photo Title
- Photo editing allowed only: cropping, color contrast, rotating
- Submitted photos will be belonged to ICC for any publication purposes
- One of the winner criterias is voting/like in Instagram & Facebook (follow ICC Instagram and Facebook)



**TOTAL PRIZE  
USD550**

## Short Video/Footage Competition

- Competition open for worldwide
- One video allowed per participant (can be done individually or group of max 3 people)
- Videos must be original work of the participant
- Time range: videos taken is year 2023 until now
- Maximum total duration is 3 minutes
- Minimum Resolution: 1080 p
- Posted in participant's own social media: Facebook and Instagram post by tagging ICC social media and #worldcoconutday2024, #worldcoconutdayICC, #coconutcommunity
- ICC can have access of reposting and any publication purposes for the published post
- Name format: Country - Name - Video Title
- Submitted videos will be belonged to ICC for any publication purposes
- Video content suggestions: *Innovative ways to serve coconut-based foods & Coconut based crafts/home product making/tutorial of making products from coconut/handicrafts*



**TOTAL PRIZE  
USD550**

## Writing Competition

- Submitted material will be belonged to ICC for any publication purposes
- Inspiring stories/experiences/research based semi popular papers are also encouraged
- Must cite minimum one reference from CORD Journal ([www.journal.coconutcommunity.org](http://www.journal.coconutcommunity.org))
- ICC can have access of any publication purposes, articles submitted could be published in CORD and Cocoinfo, with standard honorarium





# FULLY AUTOMATED SCADA based rigorous **CLEAN IN PLACE (C.I.P) SYSTEMS**



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# DESICCATED COCONUT PROCESSING MACHINERY

"Over 100 machines in operation worldwide"



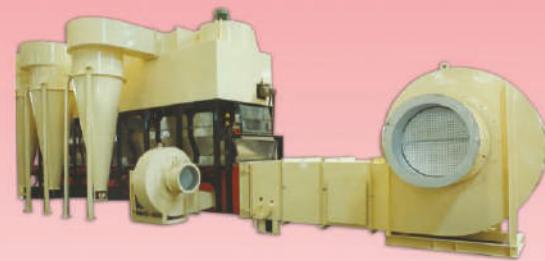
## BAND DRYER (APRON/CONTINUOS TRAY DRYER)

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**

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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 consists of twenty one member countries and accounts for 85-90% of the world production of coconut. The ICC member countries are: the Federated States of Micronesia, Fiji, Guyana, India, Indonesia, Ivory Coast, Jamaica, Kenya, Kiribati, Malaysia, Marshall Islands, Papua New Guinea, Phillipines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor Leste, Tonga, Vanuatu, and Vietnam.

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**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)