



The Cocommunity

Monthly Newsletter of the International Coconut Community

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EXECUTIVE DIRECTOR SPEAKS ...

"Productive Coconut Conservation for Sustainable Coconut Industry Development"



The future of coconut breeding to generate elite coconut varieties would be determined by the availability of diverse coconut genetic resources so that in situ and ex situ conservation and the germplasm exchange among coconut producing countries are highly recommended. Coconut genetic resources (COGENT) that were previously under the umbrella of IPGRI, then Bioversity International, and now under the International Coconut Community (ICC), has a mandate to rebuild international collaboration to conserve and use coconut genetic resources to increase coconut productivity and global coconut production.

COGENT is technically supported by four international Thematic Action Groups (ITAGs) responsible for identifying and coordinating priority projects for germplasm conservation and use, strengthening communication between researchers in the same thematic field in different countries, providing new research ideas to fill research and technological gaps and providing technical advice to the secretariat.

39 member countries of COGENT are maintaining National Coconut Genebanks (NGS) and five of the member countries are hosting the International Coconut Genebank (ICGs) pursuant to the agreement between FAO represented by the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), host government and ICC representing COGENT. ICG Africa and the Indian Ocean (ICG-AIO) is hosted by the government of Cote d'Ivoire, ICG Latin America and the Caribbean (ICG-LAC) is hosted by Brazil, ICG South Asia and Middle East (ICG-SAME) is hosted by India, ICG Southeast and East Asia (ICG-SEA) is hosted by Indonesia, and ICG South Pacific (ICG-SP) is hosted by Papua New Guinea. A substantial support from The Australian Centre for The International Agricultural Research (ACIAR) and Department of Foreign Affairs and Trade of Australia (DFAT) for COGENT in implementing its Global Strategies in conservation and use of coconut genetic resources is highly valued.

The conservation of various coconut genetic resources has environmental, social, and economic implication for nature and community. Conservation disturbances due to natural disasters, pests and diseases, conversion of land for non-agricultural purposes, climate change, and replacement of diverse traditional varieties with genetically uniform varieties could lead to genetic erosion. A comprehensive strategy to address potential issues associated with such problems needs to be realized and prepared well. Global awareness and commitment to responsibly conserve coconut genetic resources and link them to use for genetic improvement to meet consumer needs, agroecosystem resilience and other purposes are required to prevent the important coconut genetic resources from disappearing. Conservation and utilization of coconuts has become an important program to improve the welfare of farmers and sustain the industry.

DR. JELFINA C. ALOUW
Executive Director

PREVAILING MARKET PRICES OF SELECTED COCONUT PRODUCTS AND OILS

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

COPRA: The price of copra in Indonesia was US\$1,061/MT in March 2022, which was lower than previous month's price. Compared to the same month of last year the price was US\$ 207/MT higher.

In the domestic market of the Philippines (Manila), the price increased by US\$ 78/MT from US\$1,143/MT to US\$1,221/MT. The price was US\$287/MT higher compared to the price of US\$934/MT in March 2021.

COCONUT OIL: The average price of coconut oil in Europe (C.I.F. Rotterdam) for March 2022 increased from US\$2,153/MT in February to US\$2,269/MT in March 2022. This price was higher by 47% as opposed to the price in March 2021 at US\$1,542/MT.

The average local price of coconut oil in the Philippines was increased by US\$148/MT from US\$2,077/MT to US\$2,225/MT. Meanwhile, the average local price of coconut oil in Indonesia leveled up to US\$1,883/MT in March 2022. The price was US\$502/MT higher compared to the price of US\$1,381/MT in March 2021.

COPRA MEAL: The average domestic price of the commodity in the Philippines was quoted at US\$236/MT. The price was US\$4/MT higher compared to the previous month price and was US\$37/MT higher than the last year price for the same month.

The average domestic price of copra meal in Indonesia was US\$320/MT which remained the same price compared to the previous month

price. The price was US\$31/MT higher than last year's price for the same month.

DESICCATED COCONUT: The average price of desiccated coconut (DC) FOB USA in March 2022 was US\$2,704/MT, which was lower than previous month price and US\$176/MT higher than the price a year ago.

In Sri Lanka, the domestic price of desiccated coconut in March 2022 was US\$2,049/MT or US\$364/MT lower than in February 2022. Meanwhile, the price of DC in the domestic market of Philippines in March 2022 was US\$2,039/MT which remained the same as price in February 2022. Indonesian price of DC in March 2022 was lower than in February 2022. The price reduced by US\$225/MT. The prices was lower also compared to last year's price of US\$2,660/MT.

COCONUT SHELL CHARCOAL: In Philippines, the average price of the commodity in March 2022 was US\$406/MT which was lower than February 2022. Meanwhile, Indonesia's charcoal price slightly increased from US\$592/MT in February 2022 to US\$593/MT in March 2022. Moreover, compared to last year's price, the price was lower by US\$3/MT. Sri Lankan's price in March 2022 was US\$438/MT which was lower than previous month price.

COIR FIBRE: Coir fiber was traded in the domestic market in Sri Lanka at US\$106/MT for mix fiber and US\$468/MT-US\$608/MT for bristle. The Indonesian price for mixed raw fiber was US\$250/MT in March 2022 which was lower than the price in March 2021.

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

Products/Country	2022 Mar	2022 Feb	2021 Mar (Annual Ave.)	2022
Dehusked Coconut				
Philippines (Domestic)	235	237	249	227
Indonesia (Domestic, Industry Use)	243	232	226	233
Sri Lanka (Domestic, Industry Use)	246	279	n.q.	274
India (Domestic Kerala)	491	481	675	487
Copra				
Philippines (Dom. Manila)	1,221	1,143	934	1,134
Indonesia (Dom. Java)	1,061	1,070	854	1,044
Sri Lanka (Dom. Colombo)	1,556	1,610	1,509	1,619
India (Dom. Kochi)	1,278	1,232	1,912	1,255
Coconut Oil				
Philippines/Indonesia (CIF Rott.)	2,269	2,153	1,542	2,152
Philippines (Domestic)	2,225	2,077	1,616	2,065
Indonesia (Domestic)	1,883	1,722	1,381	1,744
Sri Lanka (Domestic)	3,005	3,103	2,557	3,092
India (Domestic, Kerala)	2,097	2,087	2,941	2,104
Desiccated Coconut				
Philippines FOB (US), Seller	2,704	2,721	2,528	2,661
Philippines (Domestic)	2,039	2,039	2,039	2,039
Sri Lanka (Domestic)	2,049	2,413	2,660	2,355
Indonesia (FOB)	1,975	2,200	2,175	2,138
India (Domestic)	1,826	1,855	2,511	1,844
Copra Meal Exp. Pel.				
Philippines (Domestic)	236	232	199	227
Sri Lanka (Domestic)	233	309	340	281
Indonesia (Domestic)	320	320	289	314
Coconut Shell Charcoal				
Philippines (Domestic), Buyer	406	407	493	407
Sri Lanka (Domestic)	438	530	557	490
Indonesia (Domestic Java), Buyer	593	592	596	593
India (Domestic)	531	533	621	534
Coir Fibre				
Sri Lanka (Mattress/Short Fibre)	106	131	115	120
Sri Lanka (Bristle 1 tie)	468	582	634	542
Sri Lanka (Bristle 2 tie)	608	756	822	714
Indonesia (Mixed Raw Fibre)	250	250	315	240
Other Oil				
Palm Kernel Oil Mal/Indo (CIF Rott.)	2,441	2,443	1,482	2,360
Palm Oil Crude, Mal/Indo (CIF Rott.)	1,777	1,522	1,031	1,548
Soybean Oil (Europe FOB Ex Mill)	1,957	1,596	1,164	1,674

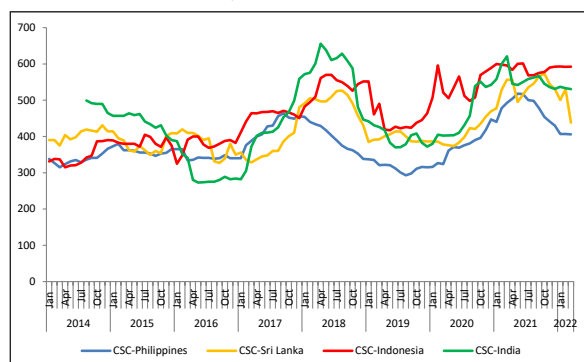
Exchange Rate

Mar 31, '22 1 US\$ = P51.79 or Rp14,358 or India Rs75.90 or SL Rs294.00
 1 Euro = US\$1.11 n.q. = no quote

MARKET REVIEW OF ACTIVATED CARBON

In the first quarter of 2022, price of coconut shell charcoal weakened following negative trend since last second half of 2021. continued to weaken showed a decreasing trend in the last quarter of 2021. Price of the charcoal in Philippines for March 2022 was US\$406/MT which was 6% lower than price in December 2021. In Sri Lanka, price of the charcoal dropped from USD531/MT in December 2021 to USD438/MT in March 2022. Meanwhile, prices of the charcoal in Indonesia, and India relatively stable during first quarter of 2022. On average, price of the charcoal was US\$593/MT in Indonesia and US\$534/MT in India during January-March 2022.

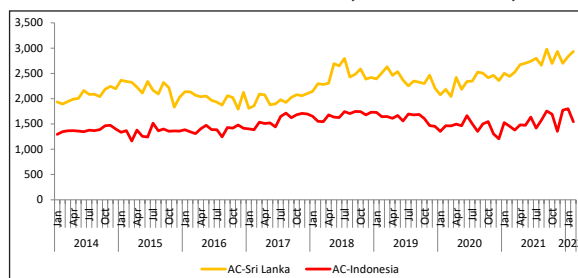
Figure 1. Price of Coconut Shell Charcoal US\$/MT (FOB) in the Philippines, Sri Lanka, Indonesia, and India January 2014 – March 2022



Source: ICC database

Meanwhile, price of activated carbon recorded an increasing trend during 2021. During the year, average export price of activated carbon from Sri Lanka was US\$2,696/MT which was 16% higher than previous year's price. Price of the carbon in Indonesia strengthened by 7% during 2021 reaching US\$1,773/MT in December 2021. In the beginning of 2022, the price remained strong. During January-February 2022, price of the product on average was US\$2,884/MT in Sri Lanka and US\$1,673/MT in Indonesia.

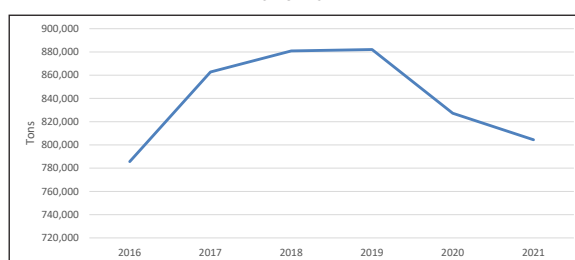
Figure 2. Export Price of Activated Carbon US\$/MT in Sri Lanka and Indonesia, January 2014 – February 2022



Source: CDA, Sri Lanka and BPS Statistics Indonesia

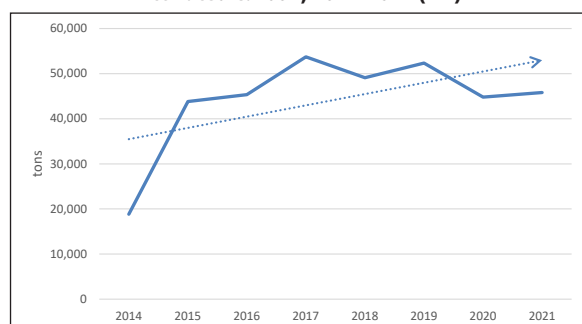
Global demand of activated carbon in 2021 continued to decline as shipment delays prolong. During 2021, global imports of activated carbon was 0.8 million tons or reduced by 3%. The decrease was following the trend in the previous year. In the period of January-December 2020, global imports of activated carbon were 0.83 million tons which was lower by 6.2% compared to the 2019's volume. In 2021, Japan was the largest importing country for the product followed US and Germany. Japan imported more than 83 thousand tons which was higher by 11% as opposed to the volume a year earlier. Meanwhile, US import of activated carbon derived from coconut shell charcoal slightly improved. US Census Bureau recorded import of the product during January-December 2021 was 45,830 MT which was increased by 03% as compared to previous year's volume.

Figure 3. Global Imports of Activated Carbon (MT) 2016-2021



Source: ITC

Figure 4. US Import of Coconut Shell Charcoal based Activated Carbon, 2014-2021 (MT)

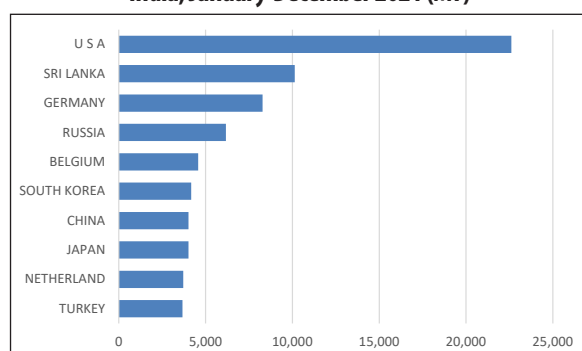


Source: US Census Bureau

Amid economic challenges due to covid-19 pandemic, some producing countries of activated carbon showed a positive export performance. In the period of January-December 2021, India exported 131,318 tons of activated carbon valued US\$258.54 million which was 37.29% higher than export volume a year earlier. USA was still a main destination for activated carbon from India. USA absorbed more than 8% of Indian activated carbon during 2021. Other major destinations of activated carbon from India were Sri Lanka, Germany, Russia, Belgium, South Korea, and China.

At the same time, Sri Lanka shipped 52,719 MT of coconut shell charcoal based activated carbon to the global market creating export earnings of US\$142.3 million. The export leveled up by more than 16% as opposed to previous year's volume for the same period. Main destinations for the activated carbon from Sri Lanka include China, Japan, Turkey and UK.

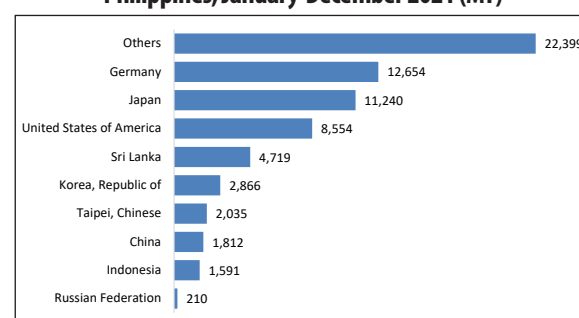
Figure 5. Export Destinations of Activated Carbon from India, January-December 2021 (MT)



Source: Ministry of Commerce and Industry, India

Meanwhile, other major exporting countries such as Philippines and Indonesia suffered from the high shipment cost. During period of January-December 2021, Philippines shipped 68,080 tons of the activated carbon to global market. The volume was lower by 4% as opposed to the 2020's export volume of 70,863 tons. During the period, major importing countries of the product from Philippines were Germany, Japan, USA, Sri Lanka and South Korea.

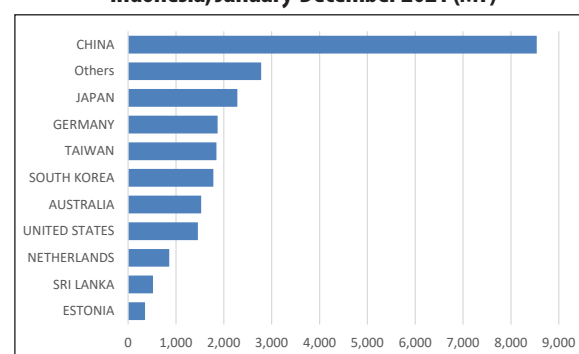
Figure 6. Export Destinations of Activated Carbon from Philippines, January-December 2021 (MT)



Source: UCAP

Similarly, export of activated carbon from Indonesia continued to decline in 2021. During January-December 2021, export of activated carbon from Indonesia was 23,812 MT. The export went down by 14% compared to previous year's volume for the same period. It created export earnings of US\$36.5 million. China, Japan, Germany, Taiwan and South Korea were the main destinations of activated carbon from Indonesia.

Figure 7. Export Destinations of Activated Carbon from Indonesia, January-December 2021 (MT)



Source: BPS-Statistics Indonesia

COMMUNITY NEWS

MUTUAL COLLABORATION CONTINUE BETWEEN INTERNATIONAL COCONUT COMMUNITY (ICC) AND NON-ALIGNED MOVEMENT CENTRE FOR SOUTH-SOUTH TECHNICAL COOPERATION (NAM CSSTC)

To continue with the mutual collaboration and the relationship between the ICC and NAM Centre for a long-term cooperation for the welfare of the coconut stakeholders of the country, the second addendum agreement was signed between Dr. Jelfina C. Alouw, Executive Director and His Excellency Ambassador Diar Norbintoro on 2nd March 2022 in a function held at Indonesian Palm Crop Research Institute (IPCRI) at Manado. The master agreement between the two organizations executed in 2020 with the main objective to engage in effort to promote the competitiveness of coconut products as well as relevant activities to develop and expand relationships with countries that coconuts are source from and to provide a framework for cooperation and coordination in achievement of mutual goals.

The addendum includes the cooperation between the Parties on: Training/symposium on the harmonized coconut quality standards, promoting replanting of coconut for increasing coconut yield in Timor Leste and deployment of one participant to the Coconut Research Institute (CRI), Sri Lanka under the international training course for the coconut development officers.

The signing was witnessed by the officials of IPCRI, Agriculture Quarantine and government of North Sulawesi province, Manado including the dignitaries Dr. Steivie Karouw, Director IPCRI, Manado, Mr. Donni Muksydayan, Head of Agriculture quarantine Manado and head of district plantation. In his address His Excellency Ambassador Diar Nurbiartoro mentioned that NAM Centre is happy to continue to collaborate with ICC for the sustainable development of the sector for the betterment of the member

countries. Dr. Jelfina C. Alouw expressed her gratitude to NAM Centre for supporting sustainable coconut development in ICC member countries, training program, webinars and in exploring the technology and knowledge to the stakeholders of the member countries. *(ICC News)*

INTERNATIONAL COCONUT GENE BANK-SOUTHEAST AND EAST ASIA (ICG-SEA) APPRAISAL

The International Coconut Genetic Resources Network (COGENT) is one of the major programs of ICC since 2019. One of the activities under the COGENT program funded by Australian Centre for International Agricultural Research (ACIAR) and Australian Department of Foreign Affairs and Trade (DFAT) is to undertake appraisals of the International Coconut Genebanks (ICGs) located in five regions i.e., ICG-SEA-Indonesia, ICG-SAME-India, ICG-SP-PNG, ICG-AIO-Ivory Coast, and ICG-LAC-Brazil. The main objective of conducting the ICG appraisal is to assess the collections' overall capacity and needs, including: i) hosting agreement status; ii) management effectiveness; iii) roles, services and use, and linkages with users and other stakeholders; iv) performance targets and work plans; and v) collection status within the global context.

The International Coconut Genebank for Southeast and East Asia (ICG-SEA) is hosted by Government of Indonesia, and is located and managed by Indonesian Palm Crop Research Institute (IPCRI), Manado, and North Sulawesi Assessment Institute for Agricultural Technology (BPTP-SULUT). The technical appraisal of the ICG-SEA was conducted from 28th February to 4th March by the team of experts of Dr. Lalith Parera, Additional Director and breeder from Coconut Research Institute, Sri Lanka, Prof. Alain Rival, Senior Project Manager, CIRAD, Jakarta and Dr. Donata Pandin, former researcher from Balit Palma. The economic analysis conducted by Mrs. Erlene Manohar, COGENT Coordinator and Dr. Celia Medina, Professor (Entomology), Institute of Weed Science, Entomology & Plant

Pathology, College of Agriculture and Food Science, University of the Philippines Los Baños from 14-17 March 2022. Besides the experts, Dr. Jelfina C. Alouw, Executive Director, Ms. Mridula Kottekkate, Assistant Director and Mr. Klaudio Hosang, Admn & Finance Officer accompanied the team from the ICC Secretariat.

Mrs. Erlene Manohar, COGENT coordinator had Focus Group Discussion with the Balit Palma team and discussed on the activities of the economic analysis of the ICGs and helped the team in preparing the action plan on the activities to be carried in ICG. The main objective of the economic appraisal is to assess the economic value of establishing ICGs and the valuation of the use of the genetic resources for varietal improvement and mass propagation. The key areas to be considered in the action plan was discussed as status of the germplasm collection ICGs (Baseline and Current conditions), total number of existing germplasm collections (Indigenous and Exotic Collections), recommended Germplasm Exchange Protocol, characterization of the vegetative and reproductive performance of each accession (Data Base Management Protocol Adopted), pest and diseases monitoring activities, Good Agricultural Practices (GAP) of the ICG farms, Fund support (Local and External) for Sustainability.

The technical appraisal team had a round table discussion with the Balit Palma team and focussed on the issues related to production, maintenance and plant protection aspects. Dr. Jelfina C. Alouw, Executive Director in her remarks mentioned that ICC-COGENT will facilitate the MoU between Government of Indonesia, FAO Treaty and ICC and shall made some amendments with regard to exchange of germplasm between the ICG regions, to improve genetic diversity and produce some new Hybrids in future. She added that the land issues faced by Balit Palma in the occupancy of the accessions would be discussed with the local North Sulawesi province government. ICC-COGENT shall facilitate the collaborative research and exchange program between the ICG host countries.

The first ICG appraisal of this series has been conducted and completed in September 2019 for the International Coconut Genebank for South Pacific (ICG-SP) in Papua New Guinea (PNG) and the second ICG appraisal was organised for the International Coconut Genebank for Africa and Indian Ocean (ICG-AIO) in January 2021. The coconut accessions conserved in ICGs and NCGs are important materials to use in research and breeding to produce better varieties with desired properties such as tolerant to climate change and biotic stresses, early flowering, high yield, high nutritional value, and beneficial to health. The responsive distribution of coconut diversity is essential for the development of sustainable coconuts globally. *(ICC News)*

A RM400 MILLION COCONUT-BASED PROJECT IN PAITAN WILL PRODUCE FRUIT

In Paitan, the Sabah government would own a 30% interest in an RM400 million high-yield coconut plantation and coconut-based industrial facility project.

The state government has set aside 2,000 hectares of land for the project, which is expected to bring in RM1.2 billion per year to Sabah's economy. It is being developed by Linaco Resources Sdn Bhd.

The corporation will also set up all of the project's necessary infrastructure, which is estimated to create 4,400 jobs once it is fully operating in 2026.

Sabah Chief Minister Datuk Seri Hajiji Noor said during the project's launch that the Memorandum of Understanding (MoU) signed between the state and Linaco Resources Sdn Bhd in March to grow Sabah's coconut-based economy is now becoming a reality.

Datuk Seri Dr Jeffrey Kitingan, Deputy Chief Minister and state Agriculture and Fishery Minister, Datuk Seri Dr Ronald Kiandee, State Secretary Datuk Seri Safar Untong, and Linaco Executive Director Joe Ling were in attendance.

According to Hajji, the company is spending RM200 million on a high-yield coconut farm and another RM200 million on a coconut-based manufacturing facility. This RM400 million initiative will make a significant difference.

With an estimated yearly income of RM1.5 billion, the economic spillovers will undoubtedly impact Paitan and the surrounding towns, as well as provide job possibilities.

In this year's state Budget, a total of RM561.81 million has been allotted to the agriculture sector, which is one of Sabah Maju Jaya's three key thrusts. (*New Straits Times*)

BELGIUM AND FAO AID COCONUT FARMERS AFFECTED BY SUPER TYPHOON RAI IN RESTORING THEIR LIVELIHOODS

In December 2021, Super Typhoon Rai slammed into the Philippines, wreaking havoc on 11 of the country's 15 provinces and displacing about 900,000 people. Rai was the country's sixteenth and most powerful typhoon in 2021. The hurricane destroyed 273 062 tonnes of agricultural products worth USD 266 million (PHP 13.3 billion), as well as 462 766 hectares of farmland.

The storm wreaked havoc on the country as it struggled to recover from the COVID-19 pandemic's economic impact. It exacerbated the difficulties faced by smallholder coconut producers in the impacted areas, further driving them into poverty and food insecurity. Smallholder farmers and their families faced additional risks owing to missed revenue as a result of disruptions in their agricultural activities, which limited access to food and other basic commodities and services.

The Belgian government, through SFERA, gave USD 500,000 to the United Nations Food and Agriculture Organization (FAO) to assist typhoon-affected farmers in regaining their footing. The money will go towards the FAO's "Emergency assistance in rebuilding food

security and agriculture-based livelihoods in Typhoon Rai-affected regions in Region VIII." The initiative would support the Philippine government's attempts to restore the coconut industry in Region VIII, which has been hammered particularly hard. The project's goal is to help agricultural families create sustainable lives.

The initiative would help 1,850 coconut growers and their families in Southern Leyte Province, with a focus on female-headed families. FAO will offer fertilizers, intercrops including Cardaba banana, different vegetable seeds, sweet potato, and gardening tools to these households. Because freshly planted coconut tree seedlings take at least six years to grow and become productive, FAO will help them develop their capacity to engage in other income-generating activities. The initiative will also assist targeted farmers in forming working ties with important institutions, such as the government and private businesses, in order to ensure that the project's outcomes are sustainable. The FAO will work with the Philippine Coconut Authority, the Department of Agriculture, and local governments. Farmers will be able to satisfy their immediate requirements and reclaim their livelihoods as a result of the assistance. (*Reliefweb*)

COCONUT CARVINGS SHAPE VILLAGERS' PROSPEROUS LIVES ACROSS CHINA

Two villagers, dressed in masks and overalls, expertly punched holes in coconut shells and cut them into round and square pieces using machines.

They live in Yushu Village, which is located in the city of Wenchang on the tropical island province of Hainan. Locals used to make ends meet by growing vegetables like peppers or working in major cities in the early years.

Villagers no longer need to labor beyond their hometowns because to the growth of the blossoming coconut carving industry. Coconut

processing has emerged as a new source of income, bringing with it a plethora of job opportunities and lucrative earnings.

Yushu Village's transformation is an example of China's attempts to promote rural vitalization.

Last week, China released its "No. 1 central document" for 2022, urging efforts to create county-level industries and commerce systems, as well as to encourage rural inhabitants to find work or start enterprises in their communities.

From gamepads to coconut loudspeakers, there's something for everyone

Processed coconut shells are shipped to manufacturers in Yushu Village where they are designed and carved into coconut sculptures. One of the factories is owned by Zhang Bidi.

Zhang, 53, was born in the Hainan city of Qionghai. His next-door neighbor was a carpenter who specialized in coconut carving when he was a youngster. When he was a youngster, he acquired a fondness for coconut carvings.

Zhang moved to Shenzhen, Guangdong Province, in south China, after graduating from high school in 1991 and working for a firm that made gamepads. Zhang worked there for several years until 2010, when he had an epiphany.

He got an idea to construct a blue-tooth loudspeaker in the shape of a coconut carved out of nowhere. It turned out to be the most brilliant idea ever.

Zhang was convinced that blue-tooth loudspeakers would be popular with the general population, so he continued his research. He believed it would be a great business opportunity since coconut shells have a high density and resonance.

Zhang returned to his hometown in 2015, where he and his wife started a coconut carving company.

Creating a promising future

Coconut carvings, according to Zhang, are a feature of Hainan's handicrafts as well as an intangible cultural heritage. The issue is that few people are aware of coconut carvings, and the business is still small.

In order to address the issue, Zhang established a coconut carving research and development studio in 2018.

Every semester, he educated 60 pupils. They may learn how to carve coconuts and create designs while also working as interns at my firm. Chen Bolin, 20, received his bachelor's degree last year. She is employed by Zhang's firm.

He joined the firm because he was drawn to the coconut carving culture and want to spread awareness of it. Chen and her companions recently created a new firm to handle the design and marketing of coconut carvings.

In Yushu Village, Fu Yanzhen, 35, married her fiancé. To make ends meet, she used to work part-time jobs in huge cities far away from home.

She no longer has to leave the house for work because of the coconut carving industry. Instead, at her village, she is in charge of cutting coconut shells.

The work pays around 3,500 yuan (approximately 555 USD) every month. It's a lot better than my previous employment, and it puts me closer to my family "Fu remarked. (*Xinhua*)

COCONUT OIL PRODUCERS BET BIG ON SUNFLOWER AND PALM OIL PRICES IN A GLOBAL RALLY

Will the increase in the price of sunflower and palm oil as a result of the Ukraine-Russia crisis boost coconut oil?

Coconut oil producers are aiming to profit from the global crisis at a time when consumer

preference for coconut oil is gradually shifting in the home market, aided by its cheaper price compared to other oils.

Consumers switched to cheaper edible oils last year due to the high price of coconut oil. Traders are now anticipating a return of these customers, which include hotels, catering units, individual families, and others, to this traditional cooking oil medium, particularly now that sunflower and palm oil prices have skyrocketed owing to the Ukraine situation.

Thalath Mahmood, Director of the Cochin Oil Merchants Association, expressed optimism that the increase in sunflower and palm oil consumption will increase local use of coconut oil, resulting in a price increase. Due to the Ukraine conflict, there may be a further increase in the price of sunflower oil.

Copra prices are currently between 85 and 90 cents per pound, while coconut oil prices are 145-150 cents per pound, compared to 175-180 cents per pound last year on the wholesale market. He claimed that now, sunflower oil prices are ruling at 180 per kg, while palm oil prices are ruling at 160, compared to 130 and 120 per kg a month ago.

Official sources in the coconut industry, on the other hand, are cautiously hopeful that a price increase would not occur, noting a healthy production season that will ensure enough copra stock availability in the market.

Consumption has decreased

According to Ubais Ali, CEO of Mezhukkattil Mills, a large coconut oil trading firm in Kochi, greater supply of copra and slow market demand owing to Covid has lowered consumer use of coconut oil to some extent. Coconut oil costs are dropping owing to plentiful supply, thanks to a healthy harvest season due to good rainfall in the State, at a time when sunflower and palm oil prices are rising. This is projected to last for a while longer, he said, adding that a consumer move toward coconut oil will likely prevent further price drops.

According to official sources, nut production has increased by more than 5% in all main producing centers. Kerala produced roughly 6,974.50 million nuts over an area of over seven lakh hectares in 2020-21. Farmers are increasingly looking at government procurement announcements owing to price drops. The government has ordered Nafed to acquire 50,000 tonnes, but the procurement process would take some time to complete. *(The Hindu Business Line)*

COCONUT FUND RELEASED BY GO LAUDS

Christopher Lawrence "Bong" Go lauded President Rodrigo Duterte for approving the release of P331 million for the Philippine Coconut Authority's proposed coconut debris management plan.

Go said the funds, coursed through the National Disaster Risk Reduction and Management Council, will provide shelter and recovery programs for communities ravaged by Typhoon 'Odette' last December.

In a statement, Go said the fund will expedite the provision of "reusable housing materials for victims of Typhoon Odette." He said he and the President fought hard to push the measure after Duterte saw the extent of the damage to agriculture, especially to coconut farmers, that the typhoon brought.

The funding "will also allow the government to expedite the disposal of affected coconut trees that pose a hazard to health and environment by converting them into coco lumbers," he said.

The plan is consistent with Presidential Directive 2022-011 to convert fallen trees into reusable housing materials for Odette survivors, he said. Under the plan, 11,573 chainsaw operators will be hired on a cash-for-work scheme.

The plan will be implemented simultaneously in provinces in Calabarzon, Western, Central and Eastern Visayas, Northern Mindanao, and Caraga.

Go also reiterated the need for a more streamlined and holistic response to disasters and other calamities. He renewed his call for the passage of Senate Bill (SB) 205 or the proposed "Disaster Resilience Act."

The bill, which Go filed in 2019, aims to address the bureaucratic challenges that undermine the government's ability to better respond and provide support to individuals affected by disasters.

It establishes the Department of Disaster Resilience, a highly specialized agency that will prepare for the impact of climate change and ensure a more proactive approach to natural disasters. Go also sought the passage of SB 1228 or the proposed "Mandatory Evacuation Center Act" which he filed in 2019.

It aims to ensure that disaster victims would have temporary shelters that would guarantee their safety, promote their social well-being, and guard their welfare while they recover and rebuild their lives. (*The Manila Times*)

A COCONUT WASTE COMPOSITE THAT IS STRONG ENOUGH TO BE USED FOR ROADS HAS BEEN DEVELOPED

A research group from Russia, India, and Thailand has developed a method for making a reinforcement composite out of waste coconut leaf sheath. The material is suitable for high-demand applications such as road construction, rail and airline interiors, as well as housing, when reinforced with a phenol-formaldehyde composite.

A good interfacial bonding at the interface of fiber and matrix drives the superior qualities of composite made of natural fibers, according to Sergey Gorbatyuk, co-author of the paper and Professor of the Department of Engineering of

Technological Equipment at NUST MISIS. Natural fibers with hydroxyl groups containing lignin and cellulose are often chemically treated to obtain it. It is feasible to enhance the degree of interlocking at the fiber-matrix interface by chemical or surface treatment, resulting in high material resistance to failure.

The findings were recently reported in *Polymer Composites*. (*The Digest*)

QUEZON GOVERNOR SUPPORTS MARCOS, BUT WANTS ASSURANCES THAT THE COCO LEVY MONEY WILL BE RETURNED TO FARMERS

While endorsing Ferdinand "Bongbong" Marcos Jr., Quezon Gov. Danilo Suarez has found himself in an odd position of requesting assurances from the presidential candidate that the coco levy funds will be returned to coconut farmers.

Suarez is alluding to funds raised through the coco levy, a tax on coconut farmers' produce imposed by Marcos' father, the late President Ferdinand Marcos Sr., ostensibly to expand the coconut sector.

They want to see an assurance from him because they are a coconut-producing province Suarez stated that he has not approached Marcos Jr. about the situation.

According to the Presidential Commission on Good Government (PCGG), the coco levy fund began in 1971, when then-President Ferdinand Marcos and his close associates imposed a tax on coconut farmers through Republic Act No. 6260, which established a Coconut Investment Fund and a Coconut Investment Company.

According to the PCGG, growers paid a total of P9.695 billion in coco levies between 1973 and 1983. These coco levy money were diverted to purchase the United Coconut Planters Bank and San Miguel Corporation for the advantage of Marcos [Sr.] and his associates.

The benefits promised to farmers after the Marcos regime fell apart did not materialize, and various lawsuits were filed to give farmers control of the fund.

The Coco Levy Fund belonged to the government for the benefit of the country's coconut producers, according to the Supreme Court in 2012. However, the implementation of the coco levy ruling has been stymied so far. *(Inquirer)*

COCONUT-CUM-COPRA AUCTION HELD AT VADIPATTI

At the Agricultural Marketing and Agri Business Department's regulated market in Vadipatti, a secret auction for coconut-cum-copra was held.

A total of 41 lots worth approximately 1.04 lakh coconuts were traded. The total amount of the transaction was Rs. 8.43 lakh. The auction drew thirteen traders, with 27 farmers benefiting. Through the auction procedure, the highest bid for a coconut was \$10.65.

At the auction, a total of 27 lots of copra were sold. The entire quantity sold was 939 kg, with a transaction value of 78,502. According to a press release from the committee, five dealers took part in the auction, and seven farmers benefited. The highest bid for one kilogram of copra was 97.75 dollars.

Madurai Market Committee secretary V. Mercy Jeyarani said, "Farmers' profit will be transferred directly into their bank accounts within 48 hours of the auction."

Farmers from the Sholavandan-Vadipatti belt, other Madurai areas, and a few from neighboring districts participated since they earn better rates for their produce. The auction drew a large number of traders from Madurai, as well as a few from Dindigul and Theni.

Farmers assess the coconuts and sort them by quality before bringing them to market.

The traders quote their prices for each lot in a bidding slip within a set time frame, making it a 'secret' auction. It is collected in a ballot box, and the officials read out the highest bid alone, and the auction is finished if the farmer accepts.

The coconut auction began in 2020, and the copra auction began in 2021.

The auctions are held on Tuesdays and Fridays at the Vadipatti controlled market. *(The Hindu)*

SABAH WILL OWN A 30% STAKE IN AN RM400 MILLION COCONUT PLANTATION PROJECT

Sabah will own a 30% stake in Linaco Resources Sdn Bhd's RM400 million high-yield coconut plantation and coconut-based manufacturing facility project in Paitan, according to Chief Minister Datuk Hajiji Noor.

He said the state government is allocating 2,000 hectares for the high-impact project, which is estimated to generate RM1.2 billion in yearly revenue for Sabah.

Linaco will build up infrastructures for the project, which is part of the Sabah Maju Jaya (SMJ) investment strategy, according to Hajiji, who is also Sabah Finance Minister. Once fully operational in 2026, the project is estimated to offer more than 4,000 jobs.

With a projected annual income of RM1.5 billion, this RM400 million project will undoubtedly have a significant influence on Paitan, and the economic spillovers would undoubtedly reshape Paitan and provide employment prospects.

"This initiative will benefit nearby communities as well," Datuk Hajiji remarked

during the project's opening yesterday at a plantation location.

Datuk Seri Dr. Ronald Kiandee, Federal Agriculture and Food Industries Minister, Datuk Seri Dr. Jeffrey Kitingan, State Agriculture and Fisheries Minister, and Linaco executive director Joe Ling were also present.

The state government and Linaco Resources Sdn. Bhd. signed a Memorandum of Understanding in March last year to develop Sabah's coconut-based industry, with the company investing RM200 million in a high-yield coconut plantation and another RM200 million in a coconut-based manufacturing facility.

The Chief Minister stated that the state government will continue to push its development plan in order to bring progress to Sabah and its people, with RM561.81 million set aside to finance the agricultural sector's demands, which was one of SMJ's three key thrusts in this year's state budget.

He said that the Sabah International Business and Economic 2022 summit, held in January this year, increased interest in the state's investment potential among local and global companies.

"There are still so much more that we need to do to pursue economic recovery. I am confident that we will succeed in bringing prosperity to Sabah and the rakyat if we remain united under one development agenda," he said.

Meanwhile, Hajiji announced that Hala Tuju SMJ will celebrate its one anniversary on March 29, signaling Sabah's progress in overcoming many hurdles, including the Covid-19 pandemic.

He claimed that the state government of Gabungan Rakyat Sabah is unwavering in its pursuit of investment, claiming that three major investments, including one from Linaco, have been made. (*The Star*)

DWARF COCONUT TREES PROVIDE A QUICK PATH TO SUCCESS

Kazi Abu Saad Chowdhury, a resident of Dinajpur's Ghoraghat upazila, has discovered that Vietnamese dwarf coconut trees are the answer to his financial woes.

As the name implies, Vietnamese dwarf palms are short in stature, and despite having shorter lifespans than taller varieties, these coconut trees bear fruit more quickly.

While lychee, mango, and guava orchards are prevalent in the region, coconut tree farms are uncommon due to the region's unfavorable climate and soil composition.

However, given the great demand for coconuts in the area, Chowdhury has wished to cultivate the unusual species ever since he learned of it.

Chowdhury was unemployed for a long time after receiving his bachelor's degree, and he spent a couple of years looking for work in Dhaka.

He ultimately made his way back to Ghoraghat, where he built a cattle farm and later ventured into aquaculture. His earnings, however, were insufficient to meet his family's monthly expenses.

Chowdhury then learned about the Vietnamese dwarf coconut tree in late 2017 and planted 50 saplings on 1.5 acres of land in the area after gathering enough information on how to cultivate it.

His initial investment was around Tk 70,000, which included fertiliser that had to be applied every six months and saplings purchased for around Tk 500 per piece from the local Department of Agricultural Extension (DAE) in mid-2018.

However, he stated that caring for the trees did not necessitate a lot of effort.

Chowdhury's dream came true when the trees began bearing fruit by the end of 2020, thanks to careful nurturing and advice from the DAE.

Yields were originally poor, but after a year of success, Chowdhury decided to increase his coconut crop the next year.

Many local kids in the region have been inspired by Chowdhury and are now planning to start a business producing coconuts.

The low-hanging fruit is easy to pluck because each full-grown dwarf coconut tree only reaches a maximum height of four or five metres.

Chowdhury initially sold the 100 coconuts he harvested from 47 plants for Tk 40-45 each piece, depending on size.

However, he stopped selling coconuts and instead focused on growing saplings for people who were interested.

Chowdhury stated, "These plants are a wonderful fit for our climate and soil."

He is currently selling each seedling for Tk 500 to Tk 600 per piece because there's a lot of interest from local kids who want to plant orchards of this exotic coconut on their land said.

Chowdhury went on to say that his orchard has earned him around Tk 3 lakh so far, and that due to increased production, his earnings will only increase in the future.

This year, Chowdhury planted an additional 50 Vietnamese dwarf coconut trees on an acre of land, expecting each plant to produce 250 to 300 pieces of fruit.

Green coconut is in great demand all year, but demand spikes around Durga Puja, the country's largest holy holiday for the Hindu minority.

Fruit coming in from the north of the country, on the other hand, meets the region's demand for coconut.

Five local youths, according to Chowdhury, have already started coconut orchards similar to his, and such initiatives will help meet the supply gap.

Many exotic fruits, such as Vietnamese dwarf coconuts, are grown in the region and its surrounding districts, according to Ezamul Haque, deputy director of the Department of Horticulture under the DAE in Dinajpur.

He continued, "These plants are profitable and require less labor and investment."

Between 2015 and 2018, nearly one lakh Vietnamese dwarf coconut tree saplings were sold to local farmers, according to data from Dinajpur's DAE. (*The Daily Star*)

VASU, AN EX-MLA, INAUGURATES A TENDER COCONUT STALL

Vasu, a former MLA, claims that tender coconut is beneficial to one's health.

Tender coconut and its products, he noticed, help to balance the diet and ensure adequate nutrition for health. He was speaking after launching the 'Yelaneeru Katte' (tender coconut stall) at the city's Vijayanagar I Stage. Various delicate coconut goods, including natural coconut shake, are available at this stall. Shridhar, the Corporator, and the stall owners Lata and Ravi were all present. (*The Times of India*)

INVEST IN VALUE-ADDED COCONUT CULTIVATION TO INCREASE PROFITS

The approach to reinvigorate coconut agriculture and secure greater returns, according to Abhilaksh Likhi, Additional Secretary, Agriculture Department, is to add

value to coconuts in various ways through farmer producer firms.

While talking with Theeradesa Nalikera Utpadaka Federation (consortium of coconut farmers) in Ezhupunna village at Cherthala in Alappuzha, he remarked that coconut oil, coconut shell, activated carbon, coconut fibre, and other products could be the finest options to start with through branding.

Likhi urged the state administration to take steps to guarantee that all agricultural initiatives, programs, and projects benefit the intended beneficiaries. He also underlined the necessity for the Coconut Development Board to guarantee that the work of the apex coconut federations is widely publicized.

According to him, the Coconut Development Board's three-tier pyramidal structure of FPOs was novel, taking into account the philanthropic nature of lower-level collectives and the incorporation of a business under the Companies Act at the apex level.

Farmers can create smaller groups and arrange activities at different levels based on the level of farmer collectives thanks to the Coconut Producers Society at the grassroots level, the Coconut Producers Federation at the intermediate level, and the Coconut Producers Company at the apex level.

Consortium of 761 members

With 761 members, the Theeradesa Nalikera Utpadaka Federation is a consortium of eight coconut producer societies. They have 41,722 palm trees, which produce over 11 lakh nuts each year. Establishing coconut nurseries and producing high-quality planting materials are two major activities.

Likhi was informed about the federation's intercrop turmeric and ginger growing training programs for various coconut farmer groups. Farmers were given planting materials for the inter-crops, as well as detailed packages

of practices to ensure that the practices were adopted.

Likhi also discussed the numerous plans and programs run by the Agriculture Ministry's central agencies. The federation's leaders informed him of their ambitions to expand their operations, and they requested the government's and CDB's assistance in forming a production business. (*The Hindu Business Line*)

COCONUT CULTIVATION IN COIMBATORE ATTACKED BY A WHITEFLY PEST ATTACK, FARMERS SEEK GOVERNMENT HELP

Farmers in Pollachi and Anaimalai taluks have urged the state government to come up with a solution to control whitefly (Rugose Spiralling Whitefly) pest attack on coconut trees.

The whitefly sucks out the sap from under the leaves, and the host plant loses all its water and nutrients. The honeydew excreted by the fly attracts ants and increases fungus growth around the damaged plant. This sooty mould also hits the sapling's photosynthetic efficiency.

KS Balachandran, a coconut farmer from Kanjampatti in Pollachi, cultivated coconut crop for 35 acres in my 50-acre farmland, but now, not a single tree is spared by the whitefly attack. The agriculture department and Tamil Nadu Agriculture University suggested using chemical pesticides to kill the insects, but the chemicals would affect growth and yield permanently, so he avoided them.

According to him, the whitefly attack has recently lowered the weight of copra from 500 gram to 350-400 gram.

They were also advised to spray water on the coconut leaves instead of chemicals, but this is not possible for all of the trees. As of now, he have tied a yellow sheet to the tree laced with castor oil 2 feet above the ground for ten trees to control the attack. However, the insects have begun attacking another farm nearby.

The president of the United Coconut Growers Association of South India, TA Krishnasamy, has urged the government to take action to save the region's coconut trees.

Even after a farmer sprays pesticides, the whiteflies return after the effect wears off, attacking other farmlands where chemicals have not been used. As a collective effort, all farmers must spray pesticides at the same time to better plug the attacks. Only a government directive can make this happen. (*The New Indian Express*)

COCONUT FIBER IS USED TO CREATE A UNIQUE GREEN COMPOSITE

Natural fibers such as coconut, sisal, coir, jute, banana, hemp, and bamboo are becoming more popular in the industry due to their high mechanical strength, stiffness, thermal stability, and corrosion resistance. As a cost-effective, cheap, and ecologically acceptable alternative to synthetic fibers, manufacturers are increasingly turning to them.

King Mongkut's University of Technology North Bangkok collaborated with the NUST MISIS Department of Engineering of Technological Equipment to undertake a study on green composites. The leading scientists from Thailand are Dr. Sanjay Mavinkere Rangappa, Senior Research Scientist at KMUTNB, and Prof. Dr. -Ing. habil. Suchart Siengchin, President of KMUTNB.

The superior characteristics of natural fiber composites are mostly due to strong interfacial bonding at the fiber-matrix interface. Natural fibers with hydroxyl groups include lignin and cellulose are usually chemically treated to obtain it. It is possible to improve the degree of interlocking at the fiber-matrix interface using chemical or surface modification, resulting in excellent material resistance to failure, said Sergey Gorbatyuk, Professor of the Department of Engineering of Technological Equipment at NUST MISIS and co-author of the study.

Scientists from NUST MISIS have developed a "green composite" based on coconut fiber reinforced with a phenol-formaldehyde composite in collaboration with colleagues from India and Thailand (based on phenol resin, a synthetic polymer).

The study involved testing tensile, flexural, and impact strength, as well as analyzing the rate of water absorption and biodegradability features of coconut fiber composites with 60% and 40% phenol formaldehyde, followed by compression molding.

According to the researchers, the low quantity of hydrophilic hydroxyl groups and reduced contaminants are responsible for the green composite's superior mechanical capabilities when compared to native coconut fiber.

To improve the technology, the researchers compared two types of fibers: untreated and mercerized, which were treated with a concentrated solution of caustic soda (the most common alkali) and washed with hot and cold water. The mercerized composite samples had a 45–60% higher elastic modulus and a 30–40% higher tensile strength than the untreated sample, owing to the formation of a special rough surface on the fibers as a result of prodding

The excellent results of the processed fiber composites based on coconut shell, according to the authors, confirm that the created composite is a good candidate for domestic and industrial applications in cabin and railway car decoration, highway construction, and commercial interior design as environmental wall and floor coatings.

The technology will be adapted in Russia using flax, hemp, and nettle fibers as raw materials. (*Cision PR Newswire*)

TONY MANTANONA CREATES MAGIC WITH COCONUTS

Anthony "Tony" Mantanona grew up grinding coconuts with his brother every day, and now, as workshop coordinator for Valley of the Latte Adventure Park, he teaches locals and visitors alike how to transform grated coconut meat into valuable coconut oil and candy.

"My mom would use it to make coconut oil and, of course, coconut milk — you make coconut milk before you make coconut oil. That's also used in our everyday cooking. But it's also used to feed our livestock, our chickens. And then she'd save a little, and it's called 'bakayu' in CHamoru. That's when you make coconut candy with it," Mantanona explained.

"So the process is still the same: you harvest coconut, husk it, grate it, and what's left is the copra, the grated coconut, which you use to extract oil, and then you have a little bit of leftover to give to the kids as a treat with coconut candy. Oil was primarily used for ointment back then, as well as frying sweet treats like donuts."

Mantanona relishes the opportunity to relive sweet memories each time he leads the workshop, which is held every four weeks, and walks participants through the entire process, from opening and grating the coconut to squeezing the moisture from the meat and then simmering until the oil rises to the top.

Guests who join the session take home delectable coconut candy and a little bottle of coconut oil, gaining access to Mantanona's decades of knowledge owing to his mother's teaching.

"We learned growing up beside her. Like, for example, cooking rice — we always had to watch her and then just follow what she does. And if we don't do it right, that means you weren't paying attention, so it's just following her methods. There's 12 of us and we each know how to cook and we learned it from our parents.

And not only that, we learned it because we lived it," Mantanona explained.

Mantanona has noticed a rise in commercial popularity of coconut oil and coconut water in recent years, but he doubts that the average consumer of either product understands the labor required to produce it, and he has seen locals and visitors balk at the price when seeking locally produced coconut products.

"It's very time-consuming because you have to harvest coconut, husk and grate 10 coconuts for one small jar," Mantanona explained. "So they're thinking, 'Is it really worth it?' But it is. And what frustrates us the most is that whenever we do that process and try to sell it, they say, 'Oh, so expensive.' But they don't understand the division of labor". (*Pacific Daily News*)

TRADE NEWS

INDUSTRY PERSPECTIVE

Vegetable oil prices reflected firmness earlier but eased somewhat lately.

Coconut oil in Rotterdam market remained subdued amid thin buying support. Only a couple of turnovers were reported concluded at \$2,170 and \$2,070/MT CIF; last week's only trade was done at \$2,095/MT CIF. Market opened with firm offers at \$2,085-2,400/MT CIF for positions from March/April through to September/October receiving spillover strength from palm oil market. Levels stayed mostly higher thereafter but lately eased following other vegetable oils. Market, however, closed in the upside at \$2,108.75-2,450/MT CIF.

The palm kernel oil market likewise reported a couple of businesses done at \$2,115 and \$2,225/MT CIF, slightly higher compared to week-ago paying level in the range \$2,110-2,210/MT CIF. Opening quotes similarly were firm at \$2,020-2,570/MT CIF for positions from March/

April through to September/October. Prices generally followed the coconut oil price action and closed as \$2,037.50-2,600/MT CIF. Prices of coconut oil and palm kernel oil continued par this week. Coconut oil, however, finally turned premium vis-a-vis palm kernel oil after being at discount for many weeks. Coconut oil started to record price premium from May/June position onwards with widening spreads as position moved farther. For the week, average price differential across positions showed coconut oil moving back to premium of \$9.02/MT from discount of \$7.44 in prior week. Price premiums/discounts per position are shown following: March/April -\$154 (-\$150 last week); April/May -\$36.00 (-\$121.00); May/June \$8.50 (-\$69); June/July \$34.50 (-\$4.50); July/August \$29.00 (\$1.00); August/September \$50.50 (\$6.50), September/October \$62.19 (\$45); October/November \$77.50 (\$118.33); November/December no data (\$106.67).

At the CBOT soya complex market, soybean futures tracked higher this week as the conflict between Russia and Ukraine continued to hamper supply of commodities from the Black Sea region, fueling the rally in grains, vegetable oils and crude mineral oil. Moreover, sentiments run high the poor crop outlook in South America would lead buyers to the US for supplies. That China had again showed interest for US stocks lately also helped underpin the market to finish the week on higher ground.

At the palm oil section, market stayed firmer this week, recovering from last week softer close. Support came from higher CBOT soybean oil futures and sustained by weaker Malaysian ringgit and higher vegetable oil and crude oil prices. The continuous rise in prices, however, met some resistance from the buy-side. And coupled with projections lately of improved production in Malaysia, levels eased a bit after midweek though had promptly reversed at close following concerns about low inventory and persistent labor shortages.

Prices of tropical oils for nearest forward shipment saw lauric oils recovering from last

week collapse. Coconut oil bounced back, advancing \$133.00/MT from \$2,109.50 last week to \$2,242.50/MT CIF in the current week; palm kernel oil hiked \$48.00/MT from \$2,230.50 to \$2,278.50/MT CIF. This contrasted with palm oil which remained in the negative territory, dropping another \$20.00/MT from \$1,777 to \$1,757/MT CIF. Thus, the price discount of coconut oil under palm kernel oil tightened appreciably from \$121 last week to just \$36.00/MT currently and price premium over palm oil widened from \$332.50 to \$485.50/MT. (UCAP Bulletin)

MARKET ROUND-UP OF COCONUT OIL

In Rotterdam, dealings continued sparse with only two trades reported done at \$2,170 for May/June and \$2,070/MT CIF for July/August. Market saw firmer levels earlier during the week but turned softer lately. However, prices settled at close mostly topping respective opening levels with offers as follows: \$2,450 for March/April; \$2,250 for April/May; \$2,147.50 for May/June; \$2,135 for June/July; \$2,075 for July/August; \$2,111.25 for August/September; \$2,108.75 for September/October; and \$2,100/MT CIF for October/November. Buyers remained thin and concentrated only in nearby position. Buyers disappeared at close except for April/May asking \$2,080/MT CIF.

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

LIVE BROADCAST HELPS THAI COCONUT EXPORT TO THE CHINESE MARKET

According to recent news from Thai media, the business organization of the Thai Consulate General in Qingdao said that after investigating the Chinese coconut market, it was found that, with the growth of the Chinese beverage market, the market demand for coconuts has also increased significantly, coupled with the lack of domestic coconut production in China. Therefore, it is a great

opportunity for Thai coconuts to be exported to China. It is recommended to use social media and live broadcast channels to expand the Chinese market.

The Ministry of Commerce of Thailand conducted a survey on the expansion of the Chinese market by Thai companies and commodities, including a survey on the Chinese coconut market in 2021. It was found that China imported 872,000 tons of coconuts, an increase of 37.4%, with a total value of 450 million US dollars. Among them, imports from Thailand amounted to 284 million US dollars, an increase of 49.41%, accounting for 62.89% of China's imported coconuts.

In addition, the import of coconuts from Indonesia was 110 million US dollars, an increase of 67.04%, and the market share accounted for 25.84%. Coconut imports from Thailand and Indonesia accounted for more than 88%, while the rest were imported from Vietnam, the Philippines and Malaysia, respectively. The reason for the increase in the number of imported coconuts in China is that, starting from the first half of 2021, more than 130 types of coconut beverage products have been launched in the Chinese market.

The business organization of the Thai Consulate General in Qingdao stated that China's demand for coconut imports continues to increase. Hainan Island, the main domestic coconut producing area, produces only 250 million coconuts per year, and China's annual market demand is as high as 2.6 billion. In addition, 150 million coconuts are needed for processing, so there is a huge demand gap. Coconut is nutritious, low in fat and delicious, making it a tropical fruit with rapidly growing demand.

Thai coconuts are very well-known in the Chinese market and can be bought in supermarkets, fruit stores and e-commerce platforms. In the Chinese market, in addition to bottled and boxed coconut milk, Thai coconuts have also developed ready-to-drink fresh

coconuts, which are convenient for consumers to eat fresh coconuts by opening holes in the coconuts. The survey found that the price of fresh coconuts in supermarkets is 20-25 RMB each, about 106-132.50 baht, which is a relatively high price in the Chinese market. (*Fresh Plaza*)

SET A TARGET FOR CRUDE COCONUT OIL PRODUCTION OF 5,000 TONS PER MONTH, IPPE COLLABORATES WITH SUPPLIERS TO BECOME PARTNERS

PT. Indo Pureco Pratama Tbk (IPPE) will soon realize the expansion of Crude Coconut Oil (CCO) production with a capacity of 5,000 tons/month in August 2022.

Not only that, IPPE President Director Syahmenan also ensured that RBD coconut oil would also be ready to be produced in December 2022 with a capacity of 100 tons/day.

According to Syahmenan, from February to March 2022, he visited 3 copra partner clusters on Sumatra Island. The clusters are the Tembilahan Copra cluster, the Jambi Copra cluster and the South Sumatra Copra cluster.

This is done to ensure the quality of raw materials for making CCO with the best quality copra. Not only that, he also wants to directly ensure that the operational activities of the copra supplier partners run well to minimize unwanted events in the future.

"Partners are the most important part for the company to maintain the supply of copra raw materials with the best quality desired by the company," said Syahmenan.

As is known, previously the President Director of IPPE together with copra supplier partners signed a Cooperation Agreement in Subang, West Java, last weekend, namely cooperation in supplying copra with the South Sumatra cluster of 5,400 tons, with the Tembilahan cluster of 7,900 tons, and the cluster of Tembilahan Jambi as much as 2,900 tons.

The signing of the agreement indicates that IPPE is committed to continuing to produce superior quality CCO.

"We believe that we can achieve the sales target in 2022. Jam that PT. Indo Pureco Pratama Tbk will also soon carry out its first export to Bangladesh in April 2022, this proves that the quality of IPPE's CCO is recognized internationally," concluded Syahmenan. (*Warta Ekonomi*)

SRI LANKA COCONUT EXPORT EARNING UP 26-PCT TO US\$834 MLN

Sri Lanka has earned a record 834 million US dollars from export of coconuts and related products last year with a strong 26 percent annual growth, the government data showed.

The island nation earned 834 million US dollars last year from the export of coconut products such as kernel, fibre, and shell, compared to 661 million in 2020, the latest Customs data showed on Wednesday (02).

"There is a huge demand in the world for local coconut based products," the Plantation Minister Ramesh Pathirana was quoted in a statement.

Export of kernel jumped 37 percent last year compared to 2020, fibre products rose 9 percent, and shell products gained 42 percent.

Pathirana inaugurated a Hybrid Seed Coconut Production Center at Tangalle with an aim to produce two million high-yielding hybrid coconut seedlings by 2023.

Sri Lanka produces three billion coconuts annually, but two billion nuts are consumed locally.

Coconut is one of the top agricultural crops after tea in Sri Lanka.

"If we increase the coconut production and export more coconuts, we can earn around US \$ 2 billion," the Plantation Minister said.

With a view to increase the production, the government is in the process of providing two coconut seedlings to every household in the country under the concept of 'coconut home garden'. (*Economy Next*)

PHILIPPINES TO HELP BANGLADESH FOR PRODUCING EXPORTABLE PINEAPPLE, BANANA, TEA, COCONUT

Philippines will give assistance to Bangladesh for producing exportable and high quality pineapple variety MD2, G9 banana, Delmon tea, rare and high value Macapuno coconut.

A memorandum of understanding (MoU) also will be signed soon between Bangladesh and Philippines in this regard.

The information came in a meeting between Agriculture Minister Dr M Abdur Razzaque and Philippines Agriculture Minister William Dollente Dar held before concluding session of the 36th Asia-Pacific regional conference of Food and Agricultural Organization (FAO) of the United Nations at Hotel Inter Continental in Dhaka, reports BSS.

Bangladesh already has launched cultivation of MD2 pineapple variety by bringing 0.30 million plants of the pineapple from Philippines, according to the meeting, adding that it is underway to bring more 0.40 million plants for cultivation.

"Philippines will give this high quality pineapple plants to Bangladesh in cheaper price and easy term and condition," said the Filipino minister.

Even the two ministers were also agreed to sign a MoU soon between the two countries for enhancing cooperation in the farm sector.

Lauding the role of Prime Minister Sheikh Hasina for her dedication to the development of the agriculture sector, William D Dar said the political will and commitment for the development of the agriculture of Bangladesh is very much praise worthy.

The agriculture, economy and human resources are still in strong positions in Bangladesh under her [Sheikh Hasina's] leadership," William added.

Meanwhile, Agriculture Minister Dr Razzaque urged Philippines to take mango variety and high yielding BRRI Dhan-89 from Bangladesh and the minister sought the experience of Golden rice cultivation in Philippines.

Later, the agriculture minister held a bilateral meeting with Sri Lankan Agriculture Minister Mahindananda Aluthgamage. The Sri Lankan agriculture minister expressed keen interest to import potatoes from Bangladesh during the meeting.

On the contrary, Agriculture Minister Dr M Abdur Razzaque underlined the need for enhancing mutual cooperation with the coconut research centre of Sri Lanka.

Dr Razzaque then made a courtesy call with Deputy Minister of Agriculture and Forestry of Laos Mr Thongphat Vongmany. The Deputy Minister assured Bangladesh to give necessary cooperation in rice import from Laos in case of any emergency. (*The Financial Express*)

EXPORTS OF COCONUT AND COCONUT-RELATED PRODUCTS GENERATED US \$ 836 MILLION IN FOREIGN EXCHANGE IN 2021 - PLANTATIONS MINISTER

The Minister of Plantations, Dr. Ramesh Pathirana said yesterday (28) that the export of coconut and coconut-based products earned US \$ 836 million in foreign exchange in 2021.

The Minister said that he expects the export of coconut and related products to earn up to US \$ 1.5 billion in the next five years.

The Minister said so while participating in the cultivation of coconuts and king coconuts under the Sojan scheme in barren paddy fields in the Balapitiya, Kosgoda, Karijjapitiya and Wellangoda anicut areas.

The Minister said that there is a possibility of earning more foreign exchange by exporting coconut and allied products by further popularizing coconut cultivation. He also said that the plantation sector has made the necessary arrangements to overcome the foreign exchange crisis faced by the country.

The Minister said that Sri Lankan coconuts are gaining a brand name similar to Sri Lankan tea due to the world recognition that Sri Lankan coconuts are tastier than Indonesian and Philippine coconuts.

The Minister further stated that while achieving these trade targets, it is expected to produce 6 million coconut seedlings this year to increase coconut production. (*Colombo Page*)

EXPORT OF COCONUTS AND RELATED PRODUCTS LIKELY TO TOUCH RECORD HIGH ON ACTIVATED CARBON SHIPMENTS

India's coconut and product exports have displayed a record performance in the first eight months of the current fiscal, fetching a revenue of ₹2,310 crore despite the Covid pandemic.

Official sources in the Coconut Development Board attributed the achievement to increased exports of activated carbon that helped India to emerge as a major player in international markets. The shipment of this product during the period ending December was over one lakh tonnes at a value of ₹1,499 crore.

Of this, the US procured more than half of the quantity followed by Sri Lanka, Germany, Russia

and China. During the eight months period, the growth in activated carbon exports was 21 per cent in quantity and 36 per cent in value.

With this rising trend, the sources told that the country's coconut and product exports are all set to cross ₹3,000 crore by March 31. Coconut and product exports in 2020-2021 was ₹2,295 crore.

Price factor

VM Abdul Kahar, Director, IndCarb Activated Carbon Pvt Ltd in Palakkad, said higher production of good quality raw nuts has helped India to get increased acceptance for its activated carbon in global markets vis-a-vis other producing nations such as the Philippines, Indonesia and Sri Lanka. The product, which is competitively priced, is mainly used for purification of gold, water and air.

According to official sources, while charcoal is made by burning coconut shells, activated carbon is produced by the steam activation process in which the surface area of charcoal is enhanced manifold by increasing its absorption capacity. There are around 30 firms that are producing activated carbon and it is priced at \$2 per kg.

Exports of fresh coconuts also did well during the period with a shipment of 31,593 tonnes, garnering an income of ₹123 crore. Coconut oil exports mainly to Gulf nations was 10,882 tonnes, registering revenue of ₹252 crore.

Import substitution

Copra shipment was 7,986 tonnes for a value of ₹91 crore. The price parity of Indian copra vis-a-vis global rates has facilitated industrial coconut oil manufacturers to increase their sourcing from the domestic market.

Earlier, the industry depended on imports from Indonesia. Against global copra price at \$1000/tonne, Indian price is below \$1200. Desiccated coconut exports also rose with 4,245 tonnes for a revenue of ₹70 crore.

Sources said there has been a 5-10 per cent rise in production of raw nuts this year mainly because of favourable agro climatic conditions in growing regions especially in Tamil Nadu which ensured a good yield. The trend is expected to continue throughout this year. (*The Hindu Business Line*)

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OTHER VEGEOIL NEWS

INDIA LOOKING AT MERCOSUR FOR SUNFLOWER OIL SUPPLY

In a bid to contain rising edible oil prices, India is looking to sign long-term contracts with Mercosur countries to import crude sunflower oil, Business Standard reported on March 26. Russia's invasion of Ukraine has disrupted imports from the country. Mercosur, a Latin American trading bloc, is composed of sovereign members states: Argentina, Brazil, Paraguay, and Uruguay.

India may need to cut import duty on sunflower oil originating from Mercosur countries and relax testing requirement under the existing preferential tariff agreement (PTA) with the group, the report said citing sources

privity to the development. The country has signed the PTA with Mercosur in 2004.

Official source said India was also exploring reviving sunflower plantations in South India to be able to partially meet domestic demand in the long run. The report said India imports 60% of its edible oil requirements, and sunflower oil accounts for around 14%. In 2021, the country imported 90% of the USD2.4 billion worth of crude sunflower oil from Ukraine and Russia, and only USD233 million worth of sunflower oil from Argentina. *(UCAP Bulletin)*

INDONESIA RAISES EXPORT LEVY ON PALM OIL

The Indonesian government has raised the upper limit of palm oil export levies by 80% to USD675 per ton from USD375 to dissuade exports amid a domestic shortage of palm oil-based cooking oil, a report last week in The Jakarta Post has said. The maximum crude palm oil tax would be applied when prices reach USD1,500 per ton.

Trade Minister Muhammad Lufti said that the government would also retract the domestic market obligation (DMO) policy that required producers to set aside 30% of their output for domestic consumption. 'This is the market mechanism, and hopefully this can maintain supply stability' he said. The new market mechanism will no longer need a DMO since selling locally will be more profitable than exporting it.

Meanwhile, the Indonesian Palm Oil Association (GAPKI) said removal of the curbs was welcome but the group, as of last week, still awaits the details of the export levy increases, Eddy Martono, secretary general said. *(UCAP Bulletin)*

RISE IN PALM OIL OUTPUT THIS YEAR NOT ENOUGH TO MEET DEMAND - ANALYST

A likely rise to about 3% in palm oil production this year in Indonesia and Malaysia, the world's

top producers, would not be enough to meet global edible oil demand, said leading analyst James Fry. In an interview in Kuala Lumpur with Reuters, Fry, chairman of agribusiness consultancy LMC International, said adverse weather in South America and Canada has curbed the supply of soybean oil and rapeseed oil, while there is lack of availability of sunflower oil due to Russia's invasion of Ukraine.

In 2021, palm oil production in Indonesia was 46.89 million MT while Malaysia produced 18.1 million MT. Fry said the war in Ukraine would halt sunflower crushing and exports, while the fighting meant there would be much less sowing taking place. "This is going to have an impact going forward," he said. Russia and Ukraine account for 80% of world export of sunflower oil, which competes with palm oil. *(UCAP Bulletin)*

SOYBEAN SHORTAGE SHUTTERS CHINA'S OIL PLANTS

Some soybean crushing plants in China are in or have planned suspensions to operations, industry sources told Agricensus last month. The shutdown came as deteriorated domestic crush margins heavily weighed on Chinese buyers' buying interests for soybeans, causing shortages of the oilseed in plants, the report said.

Sources said, crushing plants of Bunge located in Tianjin have halted operations for 49 days from February 14 to April 03, and the company's plants in Nanjing issued notices to shut down for almost a month from late February to March. Similarly, plants of Louis Dreyfus Company in Tianjin and Cargill in Hebei Province will stop operation last week of February. Moreover, according to a report by China's industry consultancy, Mysteel, many crushing plants in China's southern province, Guangxi, have plans to shut down this month. *(UCAP Bulletin)*

HEALTH NEWS

COCONUT FLOUR: A LOW-CARB, GLUTEN-FREE ALTERNATIVE TO WHEAT

Wheat products are the most popular foods in our American diet. Wheat, in one form or another, is eaten in just about every meal.

Some people, however, are allergic to wheat or cannot tolerate gluten—the protein in many grains. Others avoid wheat and grains to cut down on their carbohydrate intake to improve their health or lose excess weight. For whatever reason, planning meals without wheat is a challenging task.

In an attempt to solve this problem, food manufacturers have developed a variety of wheat-free or low-carb breads and flours made from soy, beans, and nuts. Most low-carb and gluten-free alternatives to wheat are expensive and, honestly, don't taste that good, unless they are loaded with flavor enhancers and sweeteners of one type or another.

Coconut flour provides a suitable solution. Coconut is naturally low in digestible carbohydrate, contains no gluten, is cheaper than most other nut flours, is loaded with health promoting fiber and important nutrients, and tastes terrific. Coconut flour is made from finely ground coconut meat with most of the moisture and fat removed. This flour can be used much like wheat flour to make a multitude of delicious breads, pies, cookies, cakes, snacks, and desserts as well as main dishes. Coconut flour contains less carbohydrate than soy or other nut flours. It contains more calorie-free fiber than other wheat alternatives. Coconut flour also provides a good source of protein. While coconut flour does not contain gluten—the type of protein found in many grains—it does not lack protein. It contains more protein than enriched white flour, rye flour, or cornmeal, and about as much as whole wheat flour.

High-Fiber, Low-Carb

There are two types of carbohydrate in foods: digestible and non-digestible. The type of carbohydrate that is of concern to most people is digestible carbohydrate—the starch and sugar in our foods. These are the carbs that the body converts into fat and packs into our fat cells. These are the carbs that, when eaten in excess, contribute to an assortment of health problems such as insulin resistance, obesity, and diabetes. These are the carbs that people on low-carb diets try to avoid.

Non-digestible carbohydrate, on the other hand, is composed of fiber and passes through the digestive tract without being broken down or absorbed and is passed out of the body essentially unaltered. Instead of contributing to health problems like starch and sugar do, fiber promotes good health. Most of us don't eat enough fiber and nutritionists encourage us to increase our fiber intake. The best way to do this is by eating foods rich in fiber such as whole grains, vegetables, and fruits.

Whole grains such as wheat and rye are some of the richest sources of fiber. Grains contain more fiber than fruits and vegetables. However, for people who cannot tolerate gluten, this isn't an option.

Coconut is a natural low-carb, high-fiber food ideally suited for low-carbohydrate diets. One cup of shredded fresh coconut (80 grams) contains a mere 3 grams of digestible carbohydrate and 9 grams of fiber. The remaining 68 grams consists primarily of water, fat, and protein. Although a piece of fresh coconut may taste sweet, its digestible carbohydrate content is lower and its fiber content higher than most fruits and vegetables. Coconut has three times as much fiber as it does digestible carbohydrate. In comparison, a similar volume of green beans contains 7 grams of digestible carbohydrate and only 3 grams of fiber. A carrot has 8 grams of digestible carbohydrate and only 4 grams of fiber.

Weight Management

Since you cannot digest dietary fiber, you do not derive any calories from it. Dietary fiber is calorie-free. You can eat as much as you like without worrying about gaining weight—good news for those who are concerned about their weight.

Fiber absorbs water like a sponge. For this reason, it aids in filling the stomach and producing a feeling of fullness. It provides bulk without supplying fat-promoting calories. Fiber also slows down the emptying of the stomach, thus maintaining the feeling of fullness longer than low-fiber foods. As a result, less food and fewer calories are consumed.

Studies have shown that consumption of an additional 14 grams of fiber a day is associated with a 10 percent decrease in calorie intake and a loss in body weight. The observed changes occur both when the fiber is from high-fiber foods, like fresh vegetables or coconut, or when it is from products made with high-fiber flours, such as coconut flour.

When you eat high-fiber foods that are generally low in calories, you crowd out higher calorie foods. Simply adding high-fiber foods into your diet will lower your calorie intake even if you eat the same volume of food as you normally do.

Blood Sugar and Diabetes

Blood sugar is an important issue for anyone who is concerned about heart disease, overweight, hypoglycemia, and especially diabetes because it affects all of these conditions.

Carbohydrates in our foods are broken down in the digestive tract and converted into glucose (blood sugar). Meals that contain a high concentration of carbohydrates, particularly simple carbohydrates such as sugar and refined flours, cause a rapid rise in blood sugar. Since elevated blood sugar can lead to a coma and death, insulin is frantically pumped into the blood stream to avoid this. If insulin is produced in adequate amounts, blood sugar

is soon brought back down to normal. This is what happens in most individuals. However, if insulin is not produced quickly enough or if the cells become desensitized to the action of insulin, blood glucose can remain elevated for extended periods of time. This is what happens in diabetes.

Dietary fiber helps moderate swings in blood sugar by slowing down the absorption of sugar into the bloodstream. This helps keep blood sugar and insulin levels under control. Coconut fiber has been shown to be very effective in moderating blood sugar and insulin levels. For this reason, coconut is good for diabetics.

Diabetics are encouraged to eat foods that have a relatively low glycemic index. The glycemic index is a measure of how foods affect blood sugar levels. The higher the glycemic index, the greater an effect a particular food has on raising blood sugar. So diabetics need to eat foods with a low glycemic index. When coconut is added to foods, including those high in starch and sugar, it lowers the glycemic index of these foods. This was clearly demonstrated by T. P. Trinidad and colleagues in a study published in the *British Journal of Nutrition* in 2003. In their study, both normal and diabetic subjects were given a variety of foods to eat. Some of the types of food included cinnamon bread, granola bars, carrot cake, and brownies—all foods that a diabetic must ordinarily limit because of their high sugar and starch content. It was found that as the coconut content of the foods increased, the blood sugar response between the diabetic and non-diabetic subjects became nearly identical. In other words, coconut moderated the release of sugar into the bloodstream so that there was no spike in blood glucose levels. As the coconut content in the foods decreased, the diabetic subjects' blood sugar levels became elevated, as would normally be expected from eating foods high in sugar and white flour. This study showed that adding coconut to foods lowers the glycemic index of the foods and keeps blood sugar levels under control. Sweet foods such as cookies and cakes made using coconut flour do not affect blood sugar levels like those made with wheat flour. This is good news for diabetics who want a

treat now and then without adversely affecting their blood sugar.

Cancer

Fiber acts like a broom, sweeping the intestinal contents through the digestive tract. Parasites, toxins, and carcinogens are swept along with the fiber, leading to their timely expulsion from the body. This cleansing action helps prevent toxins that irritate intestinal tissues and cause cancer from getting lodged in the intestinal tract. Colon cancer is second only to lung cancer as the world's most deadly form of cancer. Many studies have shown a correlation between high-fiber diets and a low incidence of colon cancer. For example, in one of the most extensive studies to date, involving over 400,000 people from nine European countries, it was found that those who had the highest fiber intake were 40 percent less likely to develop colon cancer.

Fiber readily absorbs fluids. It also appears to absorb harmful carcinogens and other toxic substances. Researchers at the University of Lund, Sweden, found that fiber in the diet can absorb toxins that promote cancer. Various types of fiber were examined for their absorption capacity and found to absorb 20 to 50 percent of these carcinogenic compounds.

Dr. B. H. Ershoff of Loma Linda University summarized studies reported by the Committee on Nutrition in Medical Education. The studies compared groups of rats and mice, some given high-fiber diets and others given low-fiber diets. The animals were fed various drugs, chemicals, and food additives. These substances proved to be poisonous to the animals on the low-fiber diets, yet those given high-fiber diets showed no deleterious effects.

Logically you can see the relationship between dietary fiber and its protective effect in the colon, but studies also show it protects against breast, prostate, and ovarian cancers as well. One explanation for this is that toxins lingering in the colon are absorbed into the bloodstream, and the blood then carries these

toxins to other parts of the body where they can cause cancer.

Another explanation involves estrogen. Estrogen is required for the early growth and development of breast and ovarian cancer. The liver collects estrogen and sends it into the intestines where it is reabsorbed into the bloodstream. A high-fiber diet interrupts this process. Less estrogen is allowed back into the bloodstream because the activities of bacterial enzymes in the intestine are reduced. Studies show that serum estrogen can be significantly reduced by a high-fiber diet. Progesterone, which is an antagonist to estrogen and helps protect against cancer, is not affected or reduced by fiber.

One of the primary reasons given to explain why dietary fiber protects against colon and other cancers is that it decreases intestinal transit time. If carcinogenic substances, hormones, and toxins are quickly moved through the digestive tract and out of the body, they don't get a chance to irritate tissues and instigate cancer. Coconut fiber not only absorbs and sweeps carcinogenic toxins out of the intestinal tract, it also helps prevent the conditions that promote cancer. Evidence suggests that coconut fiber may also prevent the formation of tumors in the colon by moderating the harmful effects of tumor-promoting enzymes.

Coconut Dietary Fiber and Coconut Flour

Nutritionists recommend that we get between 20 to 35 grams of fiber a day. This is 2 to 3 times higher than the average intake, which is about 10-14 grams a day. Adding coconut dietary fiber or foods made with coconut flour to your diet can significantly improve your daily fiber intake. Coconut fiber is sold as a dietary supplement. Coconut flour is sold as a grocery item like other flours. Both coconut dietary fiber and coconut flour are made from ground coconut. The difference between them is subtle, however, they may differ slightly in particle size and nutrient content.

You can increase the fiber content of your meals and enjoy many of the health benefits of coconut by simply adding a little coconut dietary fiber into the foods you normally eat each day. Research shows that adding even a little fiber to the diet can have a significant influence on health. For example, in a study on cardiovascular disease, a high-fiber diet was associated with a 21 percent lower risk of heart disease. The difference in fiber intake of the subjects wasn't great. The highest intake was only 23 grams, only about 9 or 10 grams above average. You can easily increase the fiber in your diet by 9 or 10 grams by simply adding a few tablespoons of coconut dietary fiber into the foods you normally eat each day.

You can do this by adding a tablespoon or two of coconut fiber to beverages, smoothies, baked goods, casseroles, soups, and hot cereal. This is a simple and easy way to add fiber into your daily diet without making drastic changes in the way you eat. Another way to add coconut fiber into your diet is by using coconut flour in your baking.

Up until recently coconut flour has not been used much for making baked goods. Since coconut flour lacks gluten and is highly absorbent, it cannot be substituted entirely for wheat flour in standard recipes. If you tried to make a chocolate cake by replacing all the wheat flour with coconut flour using a standard cake recipe you would fail completely. Your cake would be hard and crumbly and taste terrible.

In most cases, coconut flour cannot be substituted completely for wheat or other flours in typical bread recipes. You need to combine it with wheat, rye, or oat flour. When making quick breads, you can generally replace up to 25 percent of the wheat flour with coconut flour, but 10 to 20 percent is better. This still increases the fiber content considerably. (*Healthy Ways*)

COCONUT RECIPE

CHICKEN CHOP

Ingredients

1. 1 kg chicken, cut into small pieces
2. ½ cup butter beans (lima beans)
3. ½ cup carrots
4. ½ cup chillies
5. 3 cups thin and 1 cup thick milk extracted from 1 coconut
6. 2 tbsp. chilli powder
7. 1 tbsp. curry powder
8. 1 tsp. saffron powder
9. 3 cloves garlic, chopped
10. 2 cm fresh ginger, chopped
11. 1 piece lemongrass
12. 1 piece cinnamon
13. 2 cardamom seeds
14. 2 cloves
15. 2 tbsp. vinegar
16. 6 red onions, sliced
17. 1 pandan (screwpine) leaf
18. 2 sprigs curry leaves
19. Salt

Instruction

1. Fry chicken in coconut oil until golden brown. Set aside.
2. Boil beans, carrots and chillies. Slice and set aside.
3. Boil thin coconut milk with chilli powder, curry powder saffron powder, garlic, ginger, lemongrass, cinnamon, cardamom seeds, cloves and vinegar.
4. Add onions, pandan and curry leaves. Stir mixture until it starts to thicken.
5. Add chicken, vegetables and thick coconut milk, and cook until gravy is thick.
6. Make 8-10 servings.

(*Coconut Recipes from Around the World*)

STATISTICS

Table 1. Monthly Export of Coconut Shell Charcoal by Selected Countries 2019 - 2021 (In MT)

MONTH	Indonesia			Philippines			Sri Lanka		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
January	42,526	38,556	38,556	2,864	6,006	5,273	490	757	709
February	39,204	42,145	36,791	6,134	7,629	6,230	968	935	1,045
March	47,947	45,015	40,636	4,676	9,887	10,382	762	876	882
April	40,578	35,826	42,327	7,763	4,405	8,979	708	917	548
May	48,828	25,769	25,660	7,279	6,449	9,457	656	1,554	991
June	24,233	34,619	29,232	7,242	9,182	9,182	696	953	412
July	40,523	39,076	26,862	7,618	9,469	9,439	732	1,121	733
August	38,845	36,771	28,656	8,490	854	10,071	1,679	837	489
September	35,541	36,106	40,551	7,310	8,334	13,049	1,550	1,202	484
October	41,621	40,730	31,784	10,189	8,313	9,390	1,163	1,096	547
November	48,243	35,387	40,391	8,828	7,077	12,311	1,187	1,048	818
December	38,305	36,670	51,289	8,858	7,120		1,018	742	697
TOTAL	486,394	446,671	432,736	87,251	84,725	103,763	11,609	12,038	8,355

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

Table 2. Monthly Export of Activated Carbon by Selected Countries 2019 - 2021 (In MT)

MONTH	Indonesia			Philippines			Sri Lanka		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
January	2,582	2,171	1,415	6,216	6,819	6,170	3,429	4,177	4,311
February	2,655	2,326	2,250	7,425	7,328	5,616	2,754	3,233	3,701
March	2,469	2,412	2,609	5,771	6,991	7,193	3,577	2,738	5,050
April	2,435	2,691	2,379	7,979	4,592	5,782	2,995	2,271	3,579
May	2,489	2,256	1,929	7,399	5,782	5,865	3,708	3,784	4,781
June	1,919	2,359	1,720	6,298	6,873	5,642	4,175	4,425	4,491
July	3,044	2,404	1,925	6,207	7,896	7,071	3,976	4,395	4,025
August	2,690	2,208	1,550	5,983	6,499	5,385	4,018	4,080	3,805
September	2,156	2,325	1,799	6,630	6,864	6,876	3,611	4,054	4,435
October	2,197	2,130	1,607	6,949	6,506	6,030	3,754	4,206	4,555
November	2,289	2,133	2,348	5,624	4,713	6,450	3,321	3,771	4,650
December	1,782	2,199	2,280	5,771	6,116		3,055	4,172	5,336
TOTAL	28,708	27,614	23,812	78,252	76,979	68,080	42,373	45,306	52,719

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

Table 3. Export Destination of Activated Carbon from India and Indonesia, January-December 2021

India			Indonesia		
Country of Destination	Volume (MT)	Value (US\$ 000)	Country of Destination	Volume (MT)	Value (US\$ 000)
1. U S A	22,612	50,850	1. CHINA	8,538	8,658
2. SRI LANKA	10,131	21,510	2. JAPAN	2,782	3,864
3. GERMANY	8,282	17,910	3. GERMANY	2,281	4,524
4. RUSSIA	6,175	11,450	4. TAIWAN	1,869	3,647
5. BELGIUM	4,574	11,350	5. AUSTRALIA	1,782	4,117
6. SOUTH KOREA	4,173	9,800	6. UNITED STATES	1,526	2,844
7. CHINA	4,016	8,560	7. SOUTH KOREA	1,457	2,079
8. JAPAN	4,012	8,210	8. NETHERLANDS	858	1,558
9. NETHERLAND	3,716	7,840	9. SRI LANKA	521	1,033
10. TURKEY	3,668	7,770	10. ESTONIA	352	750
11. OTHERS	59,959	103,290	11. OTHERS	1,846	3,408
Total	131,318	258,540	Total	23,812	36,483

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

Table 4. US Imports of Coconut Shell Charcoal based Activated Carbon, 2019-2021

Month	2019		2020		2021	
	Volume (MT)	Value US\$'000	Volume (MT)	Value US\$'000	Volume (MT)	Value US\$'000
January	3,861	8,822	3,861	8,822	4,569	9,221
February	3,771	8,205	3,771	8,205	3,334	7,157
March	5,373	10,810	5,373	10,810	4,413	9,764
April	4,274	8,697	4,274	8,697	3,155	6,673
May	4,569	9,133	4,569	9,133	3,728	8,645
June	4,722	9,754	4,722	9,754	4,245	9,641
July	5,424	10,675	5,424	10,675	4,130	10,727
August	4,375	8,756	4,375	8,756	3,316	8,017
September	4,545	9,403	4,545	9,403	3,165	7,833
October	4,502	9,650	4,502	9,650	2,950	6,881
November	3,285	6,981	3,285	6,981	4,470	11,197
December	3,632	7,041	3,632	7,041	4,353	12,074
Total	52,334	107,927	52,334	107,927	45,830	107,831

Source: U.S. Census Bureau

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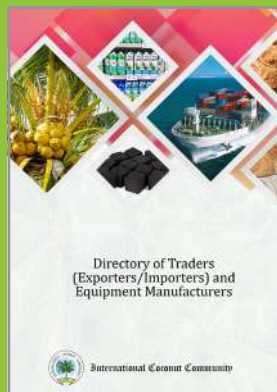
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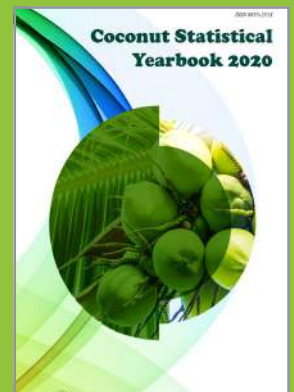
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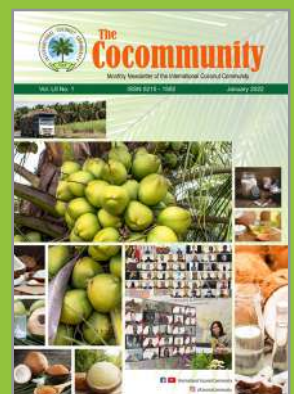
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DESICCATED COCONUT PROCESSING MACHINERY

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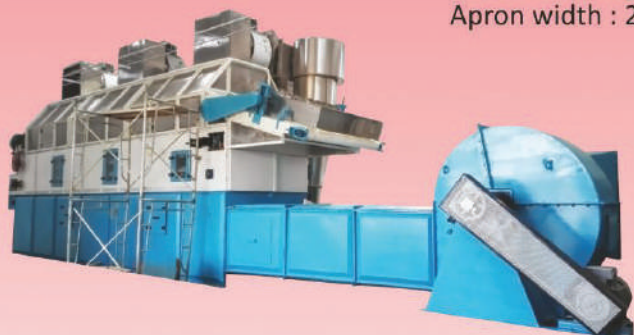
BAND DRYER (APRON/CONTINUOUS TRAY DRYER)

for Desiccated Coconut Granules, Chips & Toasted D/C

Output Capacity : 1000 to 2500 Kgs/hr.

Two Stage and Three Stage Dryers.

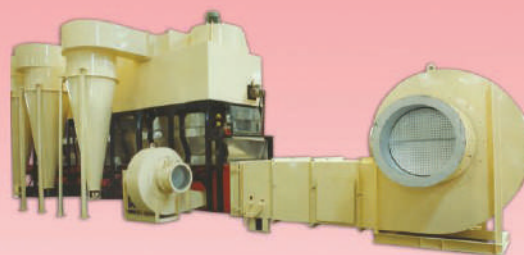
Apron width : 2640mm and 3250mm



COMBINATION DRYER

for Desiccated Coconut Granules, Chips,
Toasted D/C & Parings.

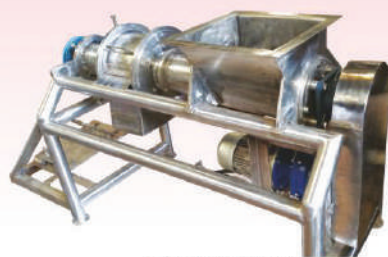
Output Capacity : 300 to 1000 Kgs/hr.



VIBRATORY FLUID BED DRYER

for Desiccated Coconut Granules & Parings.

Output Capacity : 300 to 1000 Kgs/hr.



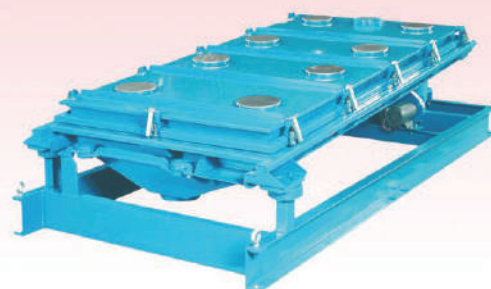
GRINDER

Output Capacity:
1000Kgs/hr.



BLANCHER

Output Capacity :
1000 to 4000 Kgs/hr.



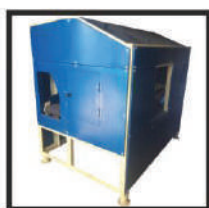
NOVATEX SCREENER/GRADER

Output Capacity :
1000 to 1500 Kgs/hr.



DESHELLING MAHINE

Output Capacity :
250 to 300 nuts/hr.



DEHUSKING MACHINE

Output Capacity :
1200 nuts/hr.



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STAINLESS STEEL CHAIN



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BY AIR MAIL

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

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

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