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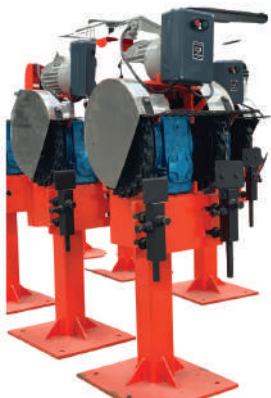
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EXECUTIVE DIRECTOR SPEAKS ...

"The spirit of the Sustainable and Resilient Coconut Sector in the 2023 Global Economic Situation"



Happy New Year dear colleagues, farmers, and other coconut stakeholders. Wishing you a healthy and prosperous new year.

As we transition into the "new normal" era after experiencing a long pandemic, rapid adaptation and innovation are needed in doing business. In line with the "new normal" and to provide more effective and efficient work, most of the information our member countries need is available digitally. These publications are an invaluable reference source for governments, the private sector, producers, processors, experts, importers, and other relevant stakeholders. Besides, the digital information has a wider reach and cost-effective publishing and the updating is possible even after the book has been published.

The ICC Secretariat regularly publishes six types of publications. The first publication published biannually since 1970 is the proceeding of the COCOTECH Conference. We have upgraded this proceeding, indexed globally by highly reputed publisher since the year of 2023 to reach the global community and increase the credibility of published works. The second publication is the *Coconut Research and Development Journal* or *CORD Journal*. This journal has been published since 1985 and has also been indexed in the Google Scholar, Science and Technology Index (SINTA), and Directory of Open Access Journals (DOAJ) since 2021. *The COCOMMUNITY* is a monthly newsletter published since 1971. ICC also publishes an annual coconut statistical yearbook to provide important information about the trends of coconut area development, production, export, and import of coconut and its products from ICC member countries and other coconut-producing countries. Other publications are the semi-annual, scientific and semi-technical magazine *COCOINFO* and *Directory of Coconut Traders and Equipment Manufacturers* published since 1994 and 1995 respectively. A new publication called the *Quarterly Bulletin* features essential data, charts, tables, and compelling infographics from various coconut and coconut products. In this dynamic fast-paced volatile, uncertain, complex, and ambiguous era, the coconut stakeholders will be of benefit from the *Quarterly Bulletin* to comprehend supply, demand, market trends, market outlook, and opportunities of coconut and its derivatives from upstream to downstream value chains, and ultimately come up with precise decision-making, problem-solving, and policy.

The current global economic situation should trigger more creativity and innovation. The coconut production system should be transformed to be more efficient, more sustainable, and more resilient. The conventional propagation of coconuts to meet global market demand for desired coconut planting materials and coconut products must be synergized with a novel micropropagation or tissue culture technology. Coconut seeds are recalcitrant or not resistant to drying or freezing and do not show dormancy, which make coconut seeds unable to be stored for a long time using conventional techniques. It is recommended to plant coconut in the field or cryopreserved the pollen, zygotic and somatic embryos for future needs.

Business model and practices need a restructuring and adaptation to consumer behavior and preference in this new normal era. The creative coconut industries must promote innovations and contribute to the welfare of farmers and society. Coconut product diversification, high-value-added products and digital marketing are becoming increasingly important to sustain the coconut business. ICC has committed and will continue to provide technical assistance and feasible option for development through multi-sectoral collaborations with governments, private sector and national/international organizations in a more efficient and coherent manner to help our members remain productive, creative, sustainable and resilient in the current global economic situation.

DR. JELFINA C. ALOUW
Executive Director

PREVAILING MARKET PRICES OF SELECTED COCONUT PRODUCTS AND OILS

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

COPRA: The price of copra in Indonesia was US\$573/MT in December 2022, which was higher than previous month's price. Compared to the same month of last year the price was US\$375/MT lower.

In the domestic market of the Philippines (Manila), the price decreased by US\$11/MT from US\$652/MT in November 2022 to US\$641/MT in December 2022. The price was US\$300/MT lower compared to the price of US\$941/MT in December 2021.

COCONUT OIL: The average price of coconut oil in Europe (C.I.F. Rotterdam) continued to decrease to the level of US\$1,155/MT in December 2022. This price was 54% lower than the price a year ago at US\$1,782/MT.

The average local price of coconut oil in the Philippines was US\$1,177/MT in December 2022 which was slightly lower than price in previous month. However, the price was much lower compared to the price of US\$1,817/MT in December 2021. Meanwhile, the average local price of coconut oil in Indonesia increased to US\$1,123/MT in December 2022 from US\$1,072/MT in November 2022. However, the price was US\$464/MT lower compared to the price in December 2021.

COPRA MEAL: The average domestic price of the commodity in the Philippines was quoted at US\$302/MT. The price was slightly higher than the previous month's price and was US\$100/MT higher than the price a year earlier.

The average domestic price of copra meal in Indonesia was US\$290/MT which was higher than previous month, but it was US\$19/MT lower than last year's price.

DESICCATED COCONUT: The average price of desiccated coconut (DC) FOB USA in December 2022 was US\$1,947/MT, which was lower than previous month price and US\$599/MT lower than the price of the same month last year.

In Sri Lanka, the domestic price of desiccated coconut in December 2022 was US\$1,685/MT or higher than in November 2022. Meanwhile, the price of DC in the domestic market of Philippines in December 2022 was US\$2,039/MT, which remained the same as previous month's price. Indonesian price (FOB) of DC in December 2022 was US\$1,300/MT which was higher than price in November 2022, and was lower compared to last year's price of US\$2,450/MT.

COCONUT SHELL CHARCOAL: In Philippines, the average price of the commodity in December 2022 was US\$377/MT which was higher than price in November 2022. Similarly, Indonesia's charcoal price slightly increased from US\$447/MT in November 2022 to US\$448/MT in December 2022. At the same time, Sri Lankan's price in December 2022 decreased to US\$327/MT as opposed to the last month's price.

COIR FIBRE: Coir fiber was traded in the domestic market in Sri Lanka at US\$48/MT for mix fiber and US\$330/MT-US\$427/MT for bristle. The Indonesian price for mixed raw fiber was US\$90/MT in December 2022 which was much lower than price a year earlier at US\$220/MT.

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

Products/Country	2022 Dec	2022 Nov	2021 Dec (Annual Ave.)	2022
Dehusked Coconut				
Philippines (Domestic)	137	132	213	180
Indonesia (Domestic, Industry Use)	131	129	223	170
Sri Lanka (Domestic, Industry Use)	213	178	283	195
India (Domestic Kerala)	427	400	533	432
Copra				
Philippines (Dom. Manila)	641	652	941	885
Indonesia (Dom. Java)	573	547	948	761
Sri Lanka (Dom. Colombo)	1,038	927	1,564	1,123
India (Dom. Kochi)	1,097	1,055	1,335	1,119
Coconut Oil				
Philippines/Indonesia (CIF Rott.)	1,155	1,167	1,782	1,626
Philippines (Domestic)	1,177	1,183	1,817	1,580
Indonesia (Domestic)	1,123	1,072	1,587	1,423
Sri Lanka (Domestic)	1,837	1,713	2,985	2,195
India (Domestic, Kerala)	1,759	1,716	2,228	1,893
Desiccated Coconut				
Philippines FOB (US), Seller	1,947	1,957	2,546	2,326
Philippines (Domestic)	2,039	2,039	2,039	2,039
Sri Lanka (Domestic)	1,685	1,435	2,510	1,796
Indonesia (FOB)	1,300	1,275	2,450	1,671
India (Domestic)	1,377	1,444	n.q.	1,561
Copra Meal Exp. Pel.				
Philippines (Domestic)	302	301	202	251
Sri Lanka (Domestic)	270	257	297	245
Indonesia (Domestic)	290	287	309	300
Coconut Shell Charcoal				
Philippines (Domestic), Buyer	377	373	430	384
Sri Lanka (Domestic)	327	355	531	405
Indonesia (Domestic Java), Buyer	448	447	592	530
India (Domestic)	427	398	531	484
Coir Fibre				
Sri Lanka (Mattress/Short Fibre)	48	39	108	75
Sri Lanka (Bristle 1 tie)	330	387	546	404
Sri Lanka (Bristle 2 tie)	427	488	869	538
Indonesia (Mixed Raw Fibre)	90	90	220	178
Other Oil				
Palm Kernel Oil Mal/Indo (CIF Rott.)	1,067	1,062	1,861	1,617
Palm Oil Crude, Mal/Indo (CIF Rott.)	940	946	1,270	1,276
Soybean Oil (Europe FOB Ex Mill)	1,409	1,652	1,411	1,667

Exchange Rate

Dec 31, '22

1 US\$ = P55.68 or Rp15,617 or India Rs82.73 or SL Rs365.08

1 Euro = US\$1.07 n.q. = no quote

MARKET REVIEW OF COCONUT OIL

A bearish market of lauric oils showed in 2022. The higher stocks and supply apparently put a pressure on price of lauric oils. Price of coconut oil plunged from US\$2,064/MT in April 2022 to US\$1,155/MT in December 2022 or a fall by 79%. Similarly, price of palm kernel oil showed the same pattern. The price of the oil deeply fell from US\$2,441/MT in April 2022 to US\$1,067/MT or cut by more than half within 8 months. However, lower price brought about demand for the oils to hike.

After experiencing a shock due to pandemic and Russia-Ukraine war, global demand for the oils upturned. The increase in shipments of coconut oil mainly supported by lower price and higher supply. Demand for the oil from European Union and US as the main importing countries went up considerably. US imports of coconut oil increased by more than 14% during January-November 2022 reaching 498,314 tons. Meanwhile, import of the oil by European countries leveled up to 795,917 tons during January-September 2022. The import was higher by more than 14% as opposed to the export volume in January-September 2021. Total export of coconut oil to these two regions is expected to grow more than 8% reaching more than 1.5 million tons.

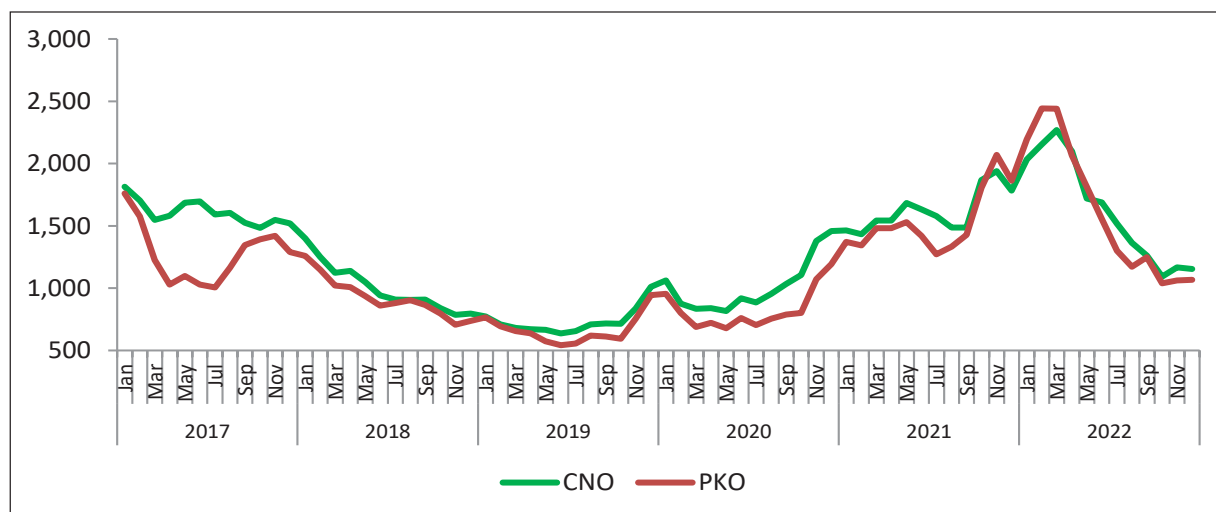
Table 1. US Imports of Lauric Oils, January-November 2021/2022

		Jan-Nov 2021	Jan-Nov 2022	Change
CNO	Volume (MT)	435,001	498,314	14.6%
	Value (USD'000)	772,712	1,022,510	32.3%
PKO	Volume (MT)	277,950	316,709	13.9%
	Value (USD'000)	516,351	682,061	32.1%
Lauric Oils	Volume (MT)	712,951	815,022	14.3%
	Value (USD'000)	1,289,063	1,704,570	32.2%

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

A different picture was found for another lauric oil, palm kernel oil. Demand for palm kernel oil rose in the US but went down in European countries. Shipments of the oil to US during January-November 2022 reached 316,709 tons which was 14% higher than previous year's volume. Meanwhile, demand for the oil from European countries during January-September 2022 declined by 21%

Figure 1. Price of Lauric Oils, January 2017 – December 2022, (USD/MT)



amounted for 556,072 tons owing to demand shifting in favor of coconut oil.

Table 2. European Union (EU28) Imports of Lauric Oils, January – September 2021/2022

		Jan-Sep 2021	Jan-Sep 2022	Change
CNO	Volume (MT)	683,748	795,917	16.4%
	Value (USD'000)	1,087,535	1,570,562	44.4%
PKO	Volume (MT)	702,673	556,072	-20.9%
	Value (USD'000)	928,593	1,131,399	21.8%
Lauric Oils	Volume (MT)	1,386,420	1,351,988	-2.5%
	Value (USD'000)	2,016,128	2,701,961	34.0%

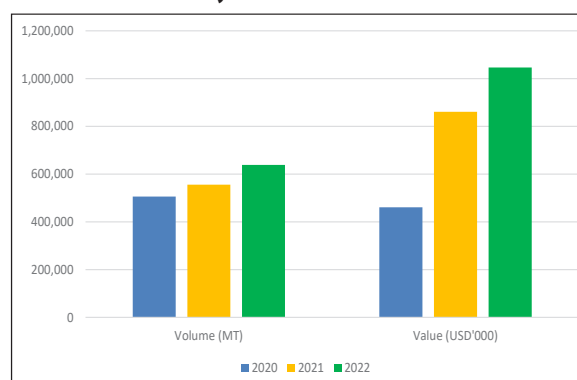
Source: ITC

In the supply side, Philippines managed to improve their export of the products. Philippine Statistics Authority reported that during the period of January-September 2022, coconut oil exports from Philippines accumulated for 939,207 tons which a jump by 58% relative to the export volume a year earlier. Lower prices and higher supply have brought about higher demand for the oil. Shipments of the oil to main destinations such as European countries and USA increased notably.

Philippines export of the oil to European countries went up to 460,125 tons in January-September 2022 from 291,861 metric tons in January-September 2021. At the same time, export to US market hiked from 122,554 tons to 159,287 tons.

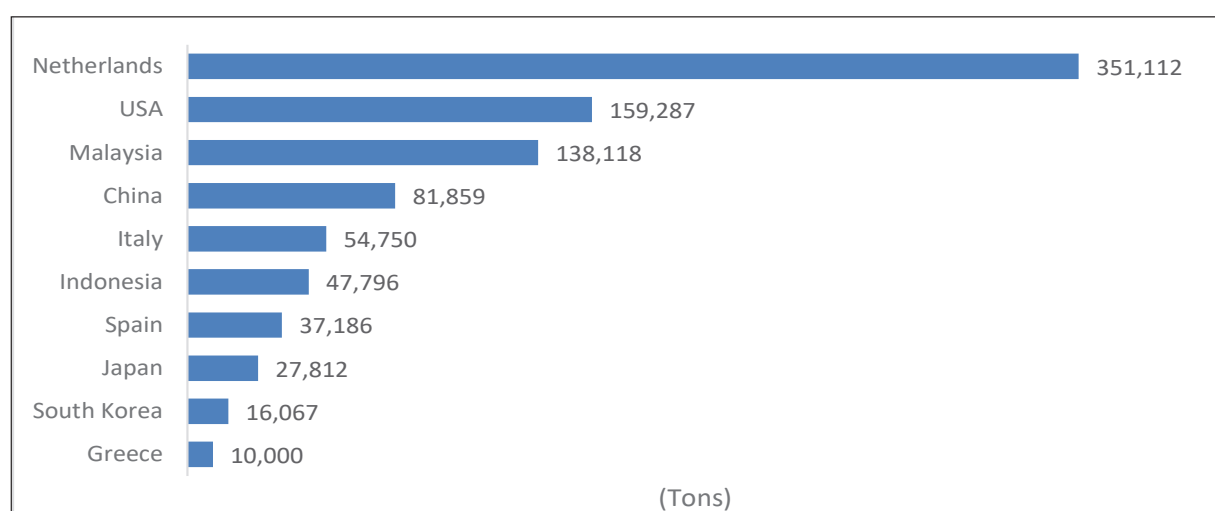
Likewise, Indonesia recorded a higher export volume of coconut oil during January-November 2022. During the period, Indonesia shipped 638,472 MT coconut oil to global market. The export was 15% higher as opposed to the previous year's volume. The export earnings jumped from US\$ 860.7 million to US\$ 1,046.7 million or an upsurge of 22% reflecting a higher volume and price of the oil. Major markets for Indonesian coconut oil were United States, Malaysia, China, and Netherlands.

Figure 3. Export of coconut oil from Indonesia, January-November 2020-2022



Source: ICC

Figure 2. Top 10 Export Destinations of Philippines' Coconut Oil, January-September 2022



Source: UCAP

COMMUNITY NEWS

MEETING FOR COLLABORATION NAM-CSSTC

As a program plan of Non-Aligned Movement Centre for South-South Technical Cooperation (NAM-CSSTC) being finalized, the Director of NAM-CSSTC invited Executive Director of ICC Dr. Jelfina Alouw to discuss the collaboration in year 2023, on 14 December 2022.

NAM-CSSTC will be conducted programs and trainings that purposed by NAM-CSSTC member countries, the program and trainings are to be involved by several partner organizations and ministries that the representatives also attended such as LDPKI, BRIN, Ministry of Foreign Affairs, Ministry of Agriculture, Ministry of Marine and Fisheries, Ministry of Health, Meteorology Climatology and Geophysics Council and ICC. The program and training for 2023 are also based on the recommendation to implement maximized training program in South-South countries.

The Executive Director of ICC explained program planned of ICC in year 2023 that would relate to NAM-CSSTC program such as Training for Coconut Development Officer in Sri Lanka, Coconut and International Conference in Trade and Marketing. NAM-CSSTC and ICC also committed to conduct coconut tissue culture training program to be implemented in 2023. Furthermore, Executive Director of ICC also recommended so NAM-CSSTC that the tissue culture program to be conducted in Indonesia, IT support to Kokonas Industri Koporesen (KIK) Papua New Guinea and paddy training in Kenya for recommendation of coconut farming/ planting integration. *(ICC News)*

END OF ICC-COAGENT PROJECT MEETING FUNDED BY ACIAR/DFAT

ICC-COAGENT's project Supporting International Initiatives to Maintain the Coconut Genetic

Network (COAGENT) funded by ACIAR-DFAT is completed in December 2022. The End of Project evaluation meeting was held in a hybrid mode in Jakarta on 12th December 2022. The meeting was attended physically by Dr. Tristan Armstrong, Senior Sector Specialist, Department of Foreign Affairs and Trade of Australia (DFAT), Canberra, Mrs. Erlene C. Manohar, COAGENT Coordinator along with Dr. Jelfina C. Alouw, Executive Director of ICC, Ms. Mridula Kottekate, Assistant Director, Mr. Alit Pirmansah, Market & Statistics Officer, Mr. Klaudio Hosang, Admin. and Finance Officer and Ms. Julieane Camile Lacsina, COAGENT support staff.

The meeting was remotely attended by Ms. Irene Kernot, Research Program Manager for Horticulture, Australian Centre for International Agricultural Research (ACIAR); Mr. Vincent Johnson, COAGENT support; Dr. Carmel Pilloti, COAGENT support from Pacific; ITAG3 leader Dr. Wayne Myrie, Dr. Andrea Garavito and COAGENT SC member Dr. Lalith Perera.

The meeting was started with the introduction and welcome address by Dr. Jelfina C. Alouw, Executive Director, followed by a message from Ms. Irene Kernot, ACIAR, and Dr. Tristan Armstrong, DFAT.

Mr. Vincent Johnson presented the Sustaining International Initiatives to Maintain COAGENT program and details of the project followed by Participatory Discussion on Expectations of the Project Team and ICC on the Needs of the Industry within the scope of the Project and in the context of ACIARs goals for the Industry. The discussion was moderated by Dr. Tristan. All the participants shared their views.

The Synthesis of the Project Achievements per Objective and the Deliverables was presented by Mrs. Erlene, COAGENT Coordinator. She discussed the objectives and deliverables in detail including the Project Implementation Challenges and Effects to the Planned Project Activities; Planned Outcomes in Support of COAGENT's Sustainability Initiatives and recommendations in the context of the project

outputs and support to COGENT's Sustainability Plan. Discussion and reactions were thereafter in each presentation in which the members participated actively. The synthesis of the full discussions and reactions of the meeting was presented by Ms. Julieane Camile Lacsina, COGENT support staff.

The meeting was concluded with the remarks by Dr. Jelfina, Executive Director, ICC. In her remarks, she thanked ACIAR and DFAT for supporting ICC-COGENT initiatives during the transaction period. She appreciated and acknowledged the services of Mrs. Erlene, COGENT coordinator, and Mr. Vincent, Coordinator Support. Ms. Irene in her concluding remarks appreciated for successful implementation of the project by the team and acknowledged the active participation of each member of the team. Dr. Tristan also appreciated the progress and achievement made under the project and congratulated one and all of the team for the successful completion of the project.

The meeting ended with the presentation of the ICC Plaque of Appreciation to Dr. Tristan Armstrong by Dr. Jelfina C. Alouw. *(ICC News)*

RESEARCH COLLABORATION INITIATIVE BETWEEN ICC-COGENT, ACIAR/DFAT AND BRIN

On 13th December a team of delegates from ICC and DFAT visited the National Research & Innovation Agency (BRIN), Government of Indonesia. The team had a fruitful discussion with Dr. Puji Lestari, Chairman of Research Organization for Agriculture and Food and Dr. Dwinita Wiken Utami, Head of Horticulture Research Centre & Plantation.

At the outset, Dr. Dwinita welcomed all. Dr. Jelfina Executive Director presented the activities of ICC focusing on the cogent program. Dr. Tristan in his address mentioned that DFAT has a long-lasting relationship with Govt of Indonesia and implemented projects related to climate change, environmental pollution, and soil erosion. He added that DFAT is always open to any potential

collaboration with BRIN facilitated by ICC, especially in Coconut Tissue Culture (CTC) as the technology is needed by the coconut industry to invest in the CTC laboratory. Mrs. Erlene briefed about the cogent activities and future programs of ICC-Cogent and how Cogent can have very well-collaborate programs with the research activities in coconut in Indonesia.

Dr. Puji, in her remarks, thanked all for sharing the information and mentioned that BRIN can collaborate with ICC in research on Mass propagation techniques in Coconut, cryopreservation, exchange of genetic resources, and conservation of genetic resources available in Indonesia. She added that the BRIN is mainly focused on research activities so whatever research will be carried out shall share with the farmers and the industry for the potential development of the coconut sector.

It has been decided that a tripartite MoU will be prepared between ICC-Cogent, DFAT/ACIAR, and BRIN to carry out the research activities for the CTC and long-term program on the conservation of genetic resources of coconut and exchange and duplication of the existing germplasms. Scholarship opportunity from BRIN to coconut scientists in ICC member countries was also discussed.

The team visited included Ms. Mridula Kottekatte, Assistant Director, Mr. Alit Pirmansah, MSO, Mr. Klaudio Hosang, AFO, and Ms. Julieane Lacsina.

The meeting concluded with the exchange of Plaques by ICC and BRIN. *(ICC News)*

WORLD'S BEST INNOVATIVE COCONUT FARMER VOTE IN JAMAICA

St Mary-based coconut farmer Michael Swaby was selected the World's Best Innovative Farmer amid entrants from 21 coconut-producing countries at a recent conference in Malaysia.

There was also additional success for Jamaica at the 50th International COCOTECH Conference

(ICC) and Exhibition, when Dr Wayne Myrie, a plant pathologist at the Coconut Industry Board (CIB) was selected runner-up to the Best Coconut Scientist of the year.

He was pushed out of the top rank by a colleague from India.

Swaby, who reaps more than 1,000 coconuts per week from his 38-acre farm in Crescent, St Mary, was pleased at winning the award.

"Words cannot convey how I feel because I have been doing some hard work on my farm for many years. I started growing coconuts when I was 17, so I have been in the business for a long time", Swaby added.

The senior farmer claimed he used to sell bananas in the 1980s and nineties but is now focusing on coconuts following what he describes a "massive replanting of the whole farm" in 2003.

Swaby does intercrop of the coconut trees with bananas and other produce and has ponds filled with tilapia fish on the property, located close to Jack's River and Fontabelle.

"I pump the water back from the ponds for use on the farm", he explained.

Swaby also does a successful business on Wednesdays and Fridays, supplying coconut water to homes in St Ann and Mary, especially to gated neighborhoods such as Vista Del Mar Apartments and St Mary Country Club.

He also bottles coconut water on the farm for the market.

On his farm, Swaby employs five workers full-time and others on a seasonal basis and reaps "1,000 to 1,200 coconuts every week, and can discover a few dry ones".

"My young trees have just started to bear, so we should quadruple that amount in a few years", he says.

As head of a group of roughly 20 farmers in the area, Swaby says he is keen on spreading his knowledge about the coconut business and planting materials.

"The business is good at this time. We are still attempting to lift the productivity in this area", he stated.

Meanwhile, Dr Myrie while discussing the conference, said a group of 10 persons from Jamaica made the journey to Malaysia, including farmers, agro-processors and members from the CIB.

He said while Jamaica cannot compete with the larger countries in terms of production, the country and the region were in a good spot because most of the trees here were young and of bearing age, unlike parts of Asia where 62 per cent of the trees are senile (beyond bearing age) (past bearing age).

"We have been aggressively replanting because of the effects of storms and the devastating yellowing disease", Dr Myrie added, saying that Jamaica can meet the local demand for jelly coconuts.

Jamaica produces between 100 million and 130 million coconuts every year.

The 50th International COCOTECH Conference (ICC) and Exhibition was held in Kuala Lumpur, Malaysia, with more than 500 participants. It was organized under the theme "Climate Change Adaptation and Mitigation Strategy for a Resilient and Sustainable Coconut Agroindustry".

Established in 1969, the ICC is an autonomous intergovernmental body which comprises of 20 member countries and accounts for around 90 per cent of the world's output of coconut. (*Loop*)

DOST, DLSU PARTNER ON VCO STUDY

The Department of Science and Technology (DOST) through the Philippine Council for Health Research and Development (PCHRD) has

given P4.6 million for a definitive study on virgin coconut oil (VCO) health benefits. The research and development (R&D) endeavor will be done with DOST-Food and Nutrition Research Institute (FNRI) and the De La Salle University Medical Center in Dasmariñas, Cavite.

FNRI director Imelda Angeles-Agdeppa will lead the R&D team for the project, titled “Bioequivalence of Virgin Coconut Oil among Healthy Filipino Male Adults: An Exploratory Pharmacokinetic Study.” The study would strive to establish the rate and degree of absorption of VCO delivered to Filipino male adults and track the safety and tolerability among takers.

Agdeppa said the result of the study will also provide additional scientific basis for the adoption and registration of VCO as a food supplement for COVID-19 patients, even initially at the Food and Drug Administration. Agdeppa also led the clinical investigations on VCO as cure for COVID-19 patients during the pandemic lockdowns in 2020 and 2021, which effectively revealed that VCO had sped the recovery of probable and suspected, and then mild to moderate cases in Santa Rosa, Laguna and Valenzuela City. (*UCAP Bulletin*)

2 COCONUT PLANTATIONS GET THAILAND’S CRUELTY-FREE STAMP: NO MONKEY BUSINESS

The certifications handed out indicate that no monkeys were tortured in the collection of coconuts.

The issue of Thai farmers using chained monkeys to ascend tall trees and bring down large coconuts was brought to public attention by PETA Asia in 2020. British retailers were the first to react and stopped stocking coconut milk from Thailand.

This prompted the Department of Agriculture to organize a virtual conference with the International Coconut Community (ICC) and apply the principles of Good Agricultural

Practice (GAP) to the business. It also resulted in the department introducing the “GAP Monkey-Free Plus” campaign.

Department director-general Rapeepat Chansriwong gave the GAP Monkey-Free Plus certificates to Theppadungporn Coconut Co Ltd in Ratchaburi and K-Fresh Co Ltd in Samut Sakhon. They were the first two large coconut product makers to pass the animal cruelty-free requirements.

Rapeepat said coconut producers are invited to join the scheme at any branch of the department’s Agricultural Research and Development Centre.

Officials will be despatched to supervise the growing and harvesting process to guarantee that GAP Monkey-Free Plus criteria have been satisfied before plantation owners receive a certificate.

This mark can also be shown on coconut-based products from these crops.

Thailand exported 236.3 billion tonnes of coconut milk in 2021 valued 12.8 billion baht. Thai coconut milk is now having the greatest market share of coconut milk products in the United States and Europe. (*Asia News Network*)

THIS SEASON VOLUMES OF THAI AROMATIC COCONUT INCREASES, PRICE IN CHINA DECLINES

In recent years, the most popular young coconut variety in the Chinese market has been the Thai Aromatic Coconut, and the peak import season is March-October every year. Due to the increasing demand from the Chinese market and the continuing growth of cross-border e-commerce channels, the planting volume of young coconut in Thailand is exhibiting a continuous increase, and the amount exported to China exceeds 85% of the entire production.

Compared with the previous production season, Thai young coconut production has increased

by 10-20% this season. Recently, Jason Xu from Yes Fruit Agricultural Technology Co., Ltd. gave his perspective on the market.

According to him, "Globally, the young coconuts sold in the market mostly come from Thailand. Due to the particularity of the climatic and geographical environment of the production area, the Aromatic Coconut is grown within a radius of 80 kilometers from Damnoen Saduak. The native coconuts have the perfect time and position to absorb sufficient water, as well as the beneficial salinity of the coast. Thai Aromatic Coconut has the features of huge size and thin skin. The water and flesh contained in the fruit have a lovely aroma, which is also a particular attraction. Compared with China's local fresh fruit young coconut, the key advantages of Thai Aromatic Coconut are varied types, flavors and fruiting times."

When talking about the price fluctuation tendency, Jason said, "A few years ago, when the supply of Thai Aromatic coconuts was plainly in short supply, the price was running at a high level. Now, as more young coconuts rush into the Chinese market, the price is gradually recovering to a normal level. Compared with the same period last year, the current general selling price of Thai Aromatic Coconut has decreased."

At this moment, Yes Fruit Agricultural Technology Co., Ltd.'s fresh young coconuts are largely supplied to China's domestic first- and second-tier wholesale markets, major distributors, and new-type retail firms. At the same time, fresh fruit is also exported to the Middle East and the US market. Next to it, the company also processes fresh coconuts that match the standards of domestic e-commerce with the trend of more and more consumers preferring online sales in China. In addition to selling fresh fruits, deep-processing commodities such as coconut water, coconut pulp, and coconut milk are also under development. At now, we have a GMP, SGS, and HACCP standard system processing factory in Thailand, and thousands of rai of orchards to grow Aromatic Coconut. The second modern processing plant is expected to be constructed and put into operation

in February 2023. After the start of production, the combination of the old and new plants can achieve a production capacity of 20 containers/day." Jason stated. (*Fresh Plaza*)

A GRAMEEN FOUNDATION PROGRAM IMPROVES 25,000 COCONUT FARMERS' LIVELIHOODS AND ASSISTS IN THE FIGHT AGAINST CLIMATE CHANGE

The Grameen Foundation and Barry Callebaut, the foremost producer of premium chocolate and cocoa products in the world, have joined forces to launch a five-year program in the Philippines' Davao region that aims to increase 25,000 smallholder farmers' copra production and incomes and connect them to markets while ensuring favorable social and environmental effects. Barry Callebaut is the sponsor of the "Sustainable Coconut Project" in support of its Sustainable Coconut Oil Strategy and the Sustainable Coconut Oil Charter.

Most confectionary items contain coconut oil, which is made from copra. Currently, the world's demand for coconuts exceeds supply.

Low output in the Philippines is a result of old trees, disjointed and untraceable supply lines, pests, illnesses, and climate change. Additionally, poor extension support, low GAP adoption, limited access to technology and financial services, and low resilience to natural calamities all lower the yields and earnings of Filipino coconut farmers.

Farm cooperatives benefit coconut growers, but the low adoption of digital tools, lack of operational and financial resources, and exclusion of female farmers limit their efficacy.

While agricultural cooperatives attempt to serve coconut producers, their effectiveness is hindered by poor adoption of digital tools, lack of financial and operational resources, and failure to incorporate female farmers.

"The Sustainable Coconut program will leverage Grameen's extensive experience

improving the productivity, income, and resilience of Filipino coconut farmers, as well as our wide range of digital solutions and training content, to comprehensively address the barriers cooperatives and farmers face," said Brent Chism, interim president and CEO of Grameen Foundation.

Oliver von Hagen, Global Director of Sustainable Ingredients at Barry Callebaut, stated: "We strive to create a sustainable coconut and coconut oil value chain as part of our commitment to using only 100 percent sustainable ingredients by 2025. We are able to move toward this goal and have a real influence on the ground by implementing this project and maintaining our partnership with the Grameen Foundation.

The program was launched earlier this year by Grameen, who will be working with eight cooperatives, 35 field agents, and 25,000 farmers in the Davao region. According to the evaluation, which questioned 1,007 coconut farmers, While the recommended production for coconuts is 75 nuts per tree per year, the region's productivity is just 32 nuts per tree per year (Grameen Foundation, 2022). (Moreno et al., 2020). (Moreno and others, 2020)

Over 90% of the farmers heavily rely on cooperatives and/or regional traders for working capital in the form of loans or cash advances.

Participants in the survey are 60 years old on average, while coconut trees in this area are 43 years old on average.

The average annual revenue from the copra industry is \$1,400.

As aggregators of smallholder farmers, agri-cooperatives play a crucial role, particularly in growing and achieving business-to-business relationships with institutional markets.

In the agriculture industry, women have latent potential that can be used, particularly in farm management, financial management, and product quality control. Long-term benefits

for the farm and its family can be achieved by leveling the playing field in agriculture and encouraging women to actively engage in farm business decisions.

In September, Grameen held a workshop on solutions in Davao City with key participants, including farmers, cooperative members, government organizations, and copra buyers. There, they discussed ways to increase farm productivity and copra production while also fostering farming households' resilience and access to markets for copra and financing.

Sustainable Coconut will make use of the ground-breaking FarmerLink technology developed by the Grameen Foundation as the effort moves toward the training and deployment of extension staff to offer farmers digital advising services. To assist smallholder farmers in increasing productivity, managing crop pests and diseases, improving crop quality, and enhancing the sustainability of their farms, the platform makes agricultural data gathered by field agents available.

Field agents are mobile-equipped to educate farmers about GAPs thanks to this digital solution package. To track the development of farmers participating in the program, FarmerLink provides a collection of farmer profiles and farm-level data. (*Manila Bulletin*)

IN A PARIS SHOW, PH COCONUTS GENERATED \$25.7 MILLION IN SALES

Small and medium-sized Filipino coconut exporters made initial sales of \$25.7 million at the five-day Salon International de l'Alimentation Paris (SIAL) exposition in Paris.

To promote higher value-added coconut products as part of the authorized activities under the Coconut Farmers and Industry Development Plan, the Department of Trade and Industry's Export Marketing Bureau set up the Coconut Philippines Pavilion at the recent SIAL Paris 2022 with the assistance of the

Philippine Trade and Investment Center in Paris and the Center for International Expositions and Mission (CITEM) (CFIDP).

The Philippines' involvement at the SIAL, according to Assistant Secretary Glenn G. Pearanda, the DTI's Officer-in-Charge for Trade Promotion, helped the CFIDP achieve its mandate and goal of improving the lives of coconut farmers.

The launchpad for food innovation, trends, and sustainability is SIAL Paris 2022. Penaranda remarked, "We are pleased that by promoting Philippine coconut goods in the international arena.

Early this year, President Duterte approved the CFIDP with the intention of improving the lot of our coconut growers.

The DTI reports that 26 representatives from 13 Philippine businesses displayed their premium coconut, cacao, coffee, and ubi goods.

The majority of the delegation's members were small and medium-sized businesses (SMEs), but there were also some huge corporations there, acting as additional anchors to draw foreign buyers to the Coconut Philippines Pavilion.

Century Pacific Agricultural Ventures Inc. (CPAVI), CocoPlus Aquarian Development Corporation, Fenor Foods International Corp., Hijo Superfoods Inc., Mardak Global Export Inc., Pasciolco Agri Ventures, Peter Paul Philippine Corp., Philippine Craft Distillers Inc., Prosource International Inc., and Unilab Inc. - Sekaya Global were among the companies that took part.

The future of the global agri-food business has been examined from a fresh perspective thanks to SIAL Paris 2022, the greatest exhibition for food innovation in the world. Additionally, it has given the exporters access to dependable customers and prospects.

H.E. Junever Mahilum-West, Ambassador of the Republic of the Philippines to France,

emphasized the enormous potential of coconut products in the European market during the opening ceremony of the Coconut Philippines Pavilion. He also noted that the participation in the expo was not just a showcase but a crucial step in assisting local farmers in the Philippines in support of the CFIDP's objectives.

"We are all aware of the value of coconut to our farmers and the people of the Philippines. We are incredibly honored to participate in this exhibition and present the coconut goods made in the Philippines to a global audience. I was happy to see that several cutting-edge goods are now made of coconut, including morning cereals and coconut wraps, demonstrating that all of your breakfast demands may be met by the coconut. In her remarks at the Philippine Pavilion's Opening Ceremony, Philippine Ambassador Junever Mahilum-West noted that the food is also very healthful because it is plant-based.

During the opening ceremony, Madame Christine Fortin, Official Representative for South and Southeast Asia at the French Ministry of Agriculture and Food, Department of International Affairs, expressed interest in the variety of coconut, cacao, and coffee goods.

PTIC-Paris scheduled discussions with cooperative and benchmarking trips to further maximize the trade show participation and the travel to France.

The team had meetings with two French cooperatives: Maison du Lait, a joint organization that oversees the dairy industry, and La Coopération Agricole (LCA), a joint representative body representing French agricultural, forestry, agri-food, and agribusiness cooperatives. The exposure to French agribusiness and food innovations, as well as a deeper understanding of measures to support local farmers, led the exhibitors to consider this activity to be one of the most educational sessions they had attended.

The delegation did market research and store visits to compare the placement of Filipino

goods in the French market with the newest market retail trends, including packaging and point-of-sale designs. (*Manila Bulletin*)

LAUNCH OF NEW HIGH-YIELDING COCONUT VARIETY TO SUPPORT SECTOR

An exercise to kick off the introduction of the Brazilian green dwarf coconut species in Guyana was organized by Hope Coconut Industries Limited, a division of the Ministry of Agriculture, in association with the Caribbean Agriculture Research and Development Institute (CARDI).

Last October, a first shipment of 1,000 seed nuts from Brazil landed in Guyana, opening the door for rigorous research and product development that is expected to revolutionize the local coconut industry.

The Brazilian green dwarf type is well recognized for its excellent yielding capabilities and high resistance to major illnesses and pests that typically impact other coconut varieties. Its capacity to produce more water than other types frequently planted in Guyana, however, is its most notable feature. This type is also claimed to generate water with a far higher sugar content than other varieties, making it sweeter.

Zulfikar Mustapha, the agriculture minister, stated during the exercise that coconut is one of the priority goods that has been highlighted for enhanced production.

"From January to September 2022, the export of coconuts and coconut products generated about [GYD - Ed.] 1.5 billion [US \$7.17 million]. Coconut is one of the key commodities that has been identified for greater production as [the Caribbean Community] CARICOM strives to cut the food import bill by 25% by 2025, with Guyana having the primary responsibility for agriculture in the region. The primary processing of coconut accounts for a sizable component of the business. To create additional value-added products, we are collaborating with our counterpart in the private sector, he said.

The minister added that it was crucial for Guyana to make sure it was in a position to access into that market because the international coconut industry was predicted to experience great expansion by 2026.

"By 2026, the coconut business is predicted to be worth \$30 billion globally, so it's critical that we lay the groundwork for entering this market. The husk, shell, meat, and water of coconuts are four common byproducts that we will try to develop into companies. For this reason, the ministry has been seeking to establish coconut nurseries and decentralize the nation's seedling production. Hope Estate was able to establish one of its first coconut nurseries as part of the National Coconut Decentralization Programme thanks to close cooperation with CARDI. Over the past two years, this intervention has continued to grow. As a result, Guyana is now one of CARICOM's top producers of coconut seedlings, he continued.

In his remarks, Ricky Roopchand, general manager of Hope Industries Limited, stated that the introduction of this variety was conceptualized as a result of conversations conducted at the first Agri-Investment Forum and Expo, which was held in Guyana in May. He added that Hope Estate was able to significantly increase its seedling production capacity during the previous two years thanks to assistance from the government and CARDI.

"With the assistance of the government, we have increased the local coconut industry's seedling production during the past two years. We currently have nine seedling nurseries across the nation, with a tenth one set to open in Lethem very shortly. If these nurseries are operated at full capacity, with the support of CARDI and the EU, by the end of the year, we would've acquired some 2,000 Brazilian green dwarf seed nuts that will be used for developing plantations across the 10 administrative regions of Guyana," he said.

Rene Van-Nes, the ambassador of the European Union to Guyana, stated in his remarks that the coconut industry will contribute to Guyana's

Green Goal and offers a win-win scenario for all parties concerned.

"I'm particularly happy that Guyana and Guyanese farmers are receiving support from the European Union to improve the livelihoods of everyone involved in the cultivation, processing, and distribution of coconut and its byproducts. By intercropping, for instance, the coconut industry in Guyana helps to achieve the Green Goal by ensuring more biodiversity, reducing the need for pest control, and diversifying land-based revenue. All parties concerned stand to gain from this, said Ambassador Van-Nes.

Before the end of the year, Guyana is likely to receive a further cargo comprising 1,000 seed nuts.

As a result of the introduction of the Brazilian green dwarf type, the genetic diversity of Guyana will increase, supporting government efforts to further enhance its national coconut breeding program, which is anticipated to begin soon. (*The Daily Herald*)

COCONUT HUSK PRODUCTS WIN GOLD FOR KOH KONG STUDENTS

Although coconuts are valued for their milk and delectable flesh, their husks and shells are most frequently used as fuel for cooking fires. With their award-winning line of lanterns, pencil holders, vases, and tissue boxes, a group of students from Hun Sen Cham Yeam High School in Cambodia have altered all that.

Doeun Sreyvit can still hear the cheers from when she and her four-person team won the Materials from Skills theme at the Entrepreneur Competition Day at the Royal University of Phnom Penh (RUPP). Ten teams competed in the competition, but her squad was the one who made their school proud. They also claimed gold medals, appreciation certificates, and reward money totaling 600,000 riel.

She revealed to The Post that she attends the high school in Cham Yeam Village, Bak Khlang Commune, Mondul Seima District, Koh Kong Province, where she is now enrolled in the 10th grade. She is the team's leader, and they used coconut shells to make crafts and other items by hand.

Sreyvit claimed that her team's use of coconut shells was the result of thinking about materials that were easily accessible yet seemed to serve no function. They questioned whether particular plant waste might be used to create consumer items.

The fact that they were considering this when the school announced the competition, she said, was a complete coincidence.

When they realized how many there were in their town and commune, they made the decision to use coconut shells. After deciding on the plan, they started asking coconut dealers for their used shells and collecting coconuts from the nearby beaches and communities.

They had to consider how to add value to the shells after they had collected them. They started with the lanterns.

We received the principal's and families' full support. We first built lanterns and vases to hang outside of our homes. Eventually, we came up with the concept to create tabletop lanterns rather than hanging ones, so they might serve as a lovely centerpiece for a wonderful lunch, for example, said Sreyvit.

After considerable trial and error, it was determined that a stand was necessary to maintain the lanterns' most beautiful shape. Once the team got a design they liked, they experimented with bamboo. She continued that a significant aspect of their attractiveness came from the utilization of only natural materials.

To make the lanterns, they only used the roundest, most flawless coconuts, some of which

they found on the beach and others which they purchased from the market.

The crew and its goods were finally taken to RUPP for the tournament in September, when they were declared the winners. Governor of Koh Kong Province Mithona Phuthong also provided the winning team with \$800 in incentives in addition to the competition awards.

Many visitors to the province marveled at the lovely objects they created while they were on exhibit at the Water Festival in Koh Kong.

"Our relatives and uncles, who enjoy organic crafts, purchased the majority of our items. Additionally, people are aware that by supporting these things, they are also contributing to the reduction of environmental trash. We want to encourage a greater interest in natural materials throughout society by minimizing environmental waste through our ideas. We wanted to disprove the notion that coconut shells are merely useless rubbish, as some people hold, she added.

Her team's Modern Coconut Shell online marketplace, which takes a lot of orders, was formed in addition to selling their coconut shell goods at exhibits. They intend to mentor future high school kids to follow in their footsteps.

The Post was informed by Oum Savon, the principal of Hun Sen Cham Yeam High School, that pupils started producing their goods earlier this year. Picking coconuts on the beach, in the villages, and at the marketplaces was their first task. He claimed that occasionally the coconut dealers would even give them the shells for nothing.

Customers were not very interested in their first items, but as soon as they had improved their ideas, they began to acquire more and more support, even earning the respect of the province governor, he said.

Regarding the environment, they have helped to lessen dispersed garbage. After eating a

coconut, we often toss it away, but these kids came up with inventive ways to use what would otherwise go to waste. Their creativity and brilliance demonstrate that they are leading by example for both their younger siblings and their peers, the speaker stated. (*The Phnom Penh Post*)

PEST DEVASTATION WILL INCREASE THE PRICE OF COCONUT

The industry cautions that unless a national program is implemented to eradicate the whitefly insect and fertilizer is made affordable for growers, the price of coconut would probably increase even more the following year.

Currently, a coconut can cost up to Rs 100.

According to the president of the Coconut Growers Association, Jayantha Samarakoon, "We may need to import coconuts next year to bring down skyrocketing prices, which may cost an additional two billion US dollars." This is more than the \$835 million in export revenue from coconuts and allied goods in the previous year.

If a nationwide program to control the insect is not implemented, the whitefly attack on coconut trees could get worse during the dry season from December to March, according to Mr. Samarakoon.

According to him, the smallholders who cultivate 80% of the coconuts are unlikely to spray their trees with the advised pesticides. They won't likely follow suggested steps to get rid of the bug on their own, he said. They would wait for government assistance.

Prices for coconuts would soar when the domestic demand could not be satisfied.

800,000 of the 1.1 million acres used for coconut cultivation are owned by smallholders, or people who own less than one acre. These cultivations are known as home gardens.

Out of the three billion nuts produced annually in the nation, 1.8 billion are consumed domestically, leaving 1.2 billion nuts for export in various forms and value adds, such as desiccated coconuts.

Financial support for a national program to spray insecticide to manage the pest has been limited as a result of the economic crisis, industry stakeholders, including producers, have noted.

Mr. Samarakoon cautioned that if the producers cannot use fertilizer next year, their harvest will be decreased by 20%. The growers have been unable to use fertilizer for nearly two years. The insect as well as a shortage of fertilizer would inevitably result in a low yield.

Head of the crop protection section of the Lunuwila Coconut Research Institute (CRI), Roshan de Silva, stated that the CRI had advised the Coconut Development Authority (CDA) of the necessity of implementing a nationwide program to combat the whitefly threat.

Although the rainy weather naturally considerably limited the expansion of the insect, the bug could spread more quickly during the upcoming dry period beginning in December.

King coconut trees may be the most severely impacted, drastically lowering the production, despite the fact that agricultural damage caused by whiteflies has not yet been quantified.

Before the first reports of attacks on coconut trees, which came from the Kegalle district in the latter part of 2019, whitefly assaults were initially only detected in vegetables and fruit, he noted.

However, the attacks have now reached several places in the Kurunegala and Puttalam districts, as well as the districts of Kalutara, Colombo, Gampaha, Kandy, Galle, and Matara.

The Kurunegala district's Alawwa, Narammala, and Polgahawela areas have also reported pest attacks, while Wariyapola, Bamunakotuwa,

Kurunegala, Kuda Galgamuwa, and Ganewatte areas have reported just small attacks.

White flies spend two months of their life cycle under coconut fronds, but only one month of that time is spent actively sucking the juice. Flies' sweet excretion drips onto the surface of the coconut leaves below it. Then a dark fungus called sooty mould begins to form on the leaves below. He said that they live on the surface and prevent the leaves' ability to produce food through photosynthesis, which results in food of poor quality and a low yield.

According to Mr. De Silva, the development of fungal gradually kills the coconut leaves.

This may be quickly under control by a nationwide program.

The CDA offers power sprayers without charge at all of its regional offices.

To acquire help spraying the pesticides and to employ power sprayers as a group or an individual, you can speak with coconut development officers, he said.

Due to the coronavirus illness pandemic and the prohibition on pesticides and fertilizers last year, the first quarter saw the greatest number of coconut trees damaged.

"At a cost of nine million rupees, we have carried out the pilot project to power spray a chemical utilizing a local antidote in three divisional secretary areas of Dankotuwa, Nattandiya, and Wennappuwa. The budget is constrained, but CDA pledged additional funding to extend this to other impacted communities, according to Mr. Silva.

The CRI has received some power sprayers, a margosa oil and soap combo, and a vehicle from the private sector stakeholders. It is advised to use the local remedy because it will not harm whitefly's natural predators.

Even knapsack sprayers might be employed with few adjustments, he claimed.

The whitefly is attracted to yellow. King coconut trees are thus more susceptible, according to Mr. De Silva. He suggested using a yellow polythene sheet coated in a yellowish oil to trap the flies by wrapping it around the coconut trees' crowns.

He added that "some people burn fires under the coconut palms at a safe distance so that the heat and fumes can also kill the flies. These techniques, in addition to chemical spraying, might get rid of the pest.

The best case scenario would be to expand this initiative to all impacted communities.

The CDA has pledged to contribute money to expand the initiative and is helping the CRI put the pilot project into action.

With the right application of fertilizer and water, the nation could easily raise the production of coconuts from three to four billion nuts per year. More than tea, this could easily generate US\$2 billion in export revenue. (*The Sunday Times*)

"IF THERE WAS COOPERATION, COCONUT LEAF WILT DISEASE COULD HAVE BEEN CONTROLLED SOONER"

Weligama Coconut Leaf Wilt Disease (WCLWD) has plagued coconut growers in the Southern Province for fourteen years, despite the identification of over 340,000 diseased coconut palms, the cutting down and destruction of over 313,000 coconut palms, and the expenditure of billions of rupees on disease control. Coconut Research Institute (CRI) Deputy Director (Research) Dr. Nayani Arachchige stated that the CRI, Coconut Cultivation Board (CCB), and other organizations have managed to contain the disease to the Southern Province and added that if the coconut growers and the community on the whole had been more cooperative, the disease could have been controlled sooner.

Phytoplasmas are responsible for the Weligama Coconut leaf Wilt disease, which can be spread by infected insect vectors, vegetative propagation

(grafting) of infected planting material onto healthy plants, vascular connections made by parasitic plants between infected and uninfected host plants, as well as by seed or embryo transmission. A coconut palm that has been infected will perish in two years. The only feasible way to stop the disease's spread is to cut down affected trees and burn their tops because there is no known cure.

According to Dr. Arachchige, a coconut tree would bear copiously in the early stages of infection, and producers would hesitate to chop down the tree even after being informed to do so by the authorities. The disease has taken so long to contain in part because of the delay, which worsens the situation because more trees nearby are vulnerable to infection.

The WCLWD was initially discovered in the Weligama region in 2008, although it had already spread to Tangalle from Galle. The CRI established a three-kilometer-wide buffer zone on either side of the A17 trunk road, which runs from Galle through Angulugaha, Henegama, Akuressa, Kamburupitiya, Kirinda-Puhulwella, Hakmana, Walsmulla, Beliatta, and ends in Tangalle, to stop the disease from spreading further.

The transfer of any palm species and their living components beyond of the specified area was outlawed by the government by gazette notice No. 1542/7 of the 24th of March 2008. Due to various limitations, the ban was not strictly followed, but it was lucky that the disease did not spread to other coconut-growing regions.

The majority of the sickness has been found in the Matara area, where it was first discovered. According to data acquired from the Coconut Cultivation Board, 313,857 sick trees had been found in the Matara district as of September 30, 2022.

The cost incurred by a grower to care for a plant until it starts giving fruit and the loss of produce are much higher than the rupees 3,000 per tree that was paid to growers who complied with

the order issued by the CCB authorities and chopped down the unhealthy trees.

The annual production in the Matara district decreased from 121 million nuts in 2011 to 96 million nuts in 2019 and to 73 million nuts in 2020 as a result of WCLWD and other causes like the Toque macaque and Grizzled Giant Squirrel consuming coconuts.

Because the Plant Protection Act forbids planting any kind of palm trees in locations where WCLWD has been found, some growers have been forced to remove their whole plantation and plant other crops.

If farmers, the general people, and the government continued to give appropriate funding, WCLWD may be completely eradicated in the near future, according to the CCB. (*Daily News LK*)

A RISK TO COCONUT AND OTHER AGRICULTURAL CROPS FROM THE WHITE FLY

In Sri Lanka, the White Fly family (Aleyrodidae) is posing an increasing threat to coconut and other agricultural products.

White flies rob plant juices, which causes harm to plants. Plants that are heavily affected can suffer severe weakening and poor growth. Frequently, leaves become dry, turn yellow, and fall off too soon. Crop viruses are also spread by white flies.

Around 1500 species of White Fly have been reported from around the world, according to Dr. Nyanie Aratchige, Deputy Director (Research) of the Coconut Research Institute. Four of these species, *Aleurotrachelus atratus* (Palm-infesting Whitefly), *Paraleyrododes minei* (Citrus Nesting Whitefly), *Aleurodicus dispersus* (Spiraling Whitefly), and *Aleurodicus cocois* (Coconut White

Dr. Aratchige said that the first time the White Fly was mentioned as afflicting coconut palms was in Barbados in 1846. Since the 1990s, outbreaks

have been documented in the Caribbean and South American countries, as well as in India since 2016.

Since 1990, the spiraling whitefly species *Aleurodicus dispersus* has been present in Sri Lanka, but it was only thought to be a minor pest to coconut palms compared to other crops at the time.

The first significant outbreak of white flies in Sri Lankan coconut plantations was reported in 2019 from the Kegalle District, and it may have been brought about by the unintentional introduction of a new species through the illegal importation of seedlings in the *Palmae* group, the effects of climate change, and the abrupt decline in natural enemy populations of the native population of White flies due to excessive use of insecticides on other crops.

In Gampaha, Kegalle, Kandy, Kalutara, Colombo, Kurunegala, Ratnapura, Puttalam, and even the Galle, Matara, and Hambantota Districts, which have been battling the Weligama Coconut Leaf Wilt illness for more than ten years, Dr. Aratchige claimed that White flies have infiltrated coconut fields.

The White Fly is found on host plants such as Curry leaves, Guava, Citrus, Avocado, Eggplant, Okra, Cashew, Indian almond (Kottamba), Caryota palm (Kithul palm), Areca nut, Ornamental plants, Jackfruit, Jackfruit, Breadfruit, Neem, Pigeon pea, several species of Pepper, Water melon, Coffee, etc.

The Coconut Research Institute and the Coconut Cultivation Board are running educational campaigns on pest detection and coordinated insecticide spraying.

Dr. Aratchige advised using the following insecticides or setting up yellow sticky traps to control the problem.

Thiomethoxam (Actara) (3 g in 10 L of water) or Carbosulfan (Marshal 20) (20 ml in 10 L of water) or Chlorantraniliprole + Thiomethoxam (Virtako

40G) are some other options. Neem oil and soap mixture (Neem oil - 10 ml, soap powder - 05 g diluted in 1 L of water) is another option (2.5 g in 10 L of water)

It is advised to treat all affected areas with a neem oil and soap mixture because it is less hazardous to whiteflies' predatory natural enemies. Artificial pesticides are especially advised for newly afflicted areas and the nurseries for coconut seedlings.

The CRI is investigating chemical and biological control strategies and has enlisted the help of other nations to import rare natural adversaries of the white fly. (*Daily FT*)

MANGALURU: A PROGRESSIVE FARMER HAS DEVELOPED A TREE BIKE TO CLIMB COCONUT TREES

Researcher on agriculture in Bantwal Komale A similar device has been created by Ganapathi Bhat to climb coconut trees, who also created a tree bike to climb arecanut trees.

Arecanuts are the primary economic crop in the coastal region. But there aren't enough workers to climb the tree. In order to ascend arecanut trees, Ganapati Bhat, a forward-thinking farmer who possesses a BSc, created a tree bike in 2019. Over 700 arecanut tree bikes have been sold thus far. This 54 kg weighted tree bike costs Rs 85,000. The bike that Ganapati Bhat invented is now manufactured commercially by Shivamogga-based Mebens Engineering Solutions.

Many farmers asked Ganapathi Bhat to create a tree bike that would allow them to climb coconut trees. Due to the coconut trees' minor bend, the same bike cannot be utilized. Therefore, the tool designed to scale an arecanut tree does not function on a coconut tree. Finally, Ganapathi Bhat has created a tree bike that can climb coconut trees.

The coconut tree bike needs gasoline to operate. It takes one liter of gasoline to scale

70 coconut trees and remove their fruit. In his farm, Ganapathi Bhat teaches how to operate the device. The device was created only ten days ago.

According to Ganapathi Bhat, Mandya, Kerala, and Tamil Nadu, where coconuts are abundantly cultivated, have expressed interest in his tree bike. Twenty machines have already been sold. This device was also handed by Ganapathi Bhat to the Keralan center for coconut research.

The goal of Ganapathi Bhat's invention is to create a dual-purpose tree bike that can be used on both coconut and arecanut trees.

A world record has been set by Ganapathi Bhat's tree bicycle, which can ascend 80 feet in just 25 seconds. At Campco and agricultural exhibits, he demonstrated the device and displayed it. Among the several honors Ganapathi Bhat has received is "Super Star Farmer." (*Daiji World*)

WHAT ZANZIBARI COCONUTS COST REFLECTS ABOUT AFRICAN DEVELOPMENT

Musa Haidar swings a coconut from side to side next to his ear. The market vendor is pleased by the enormous brown ovoid's splashing and places it back on top of the pile at his stall outside of Zanzibar City, the capital of the east African island.

However, his clients are less content. Several years ago, a coconut would have cost 500 Tanzanian shillings (\$0.20), but today, it would cost 1,500 shillings. As a result, making curries or other foods with coconut milk is more expensive. The prices you see are abnormal, claims Mr. Haidar. The price of coconuts has increased for locals.

Why have prices skyrocketed? Another seller of coconuts named Omar Yusuf Juma says, swinging his machete for emphasis, "People are chopping, chopping." Just 3.4 million coconut trees were discovered in 2013–2014, compared to 5.7 million in the late 1990s. Falling availability

has resulted in increased pricing because famished Zanzibaris continue to want creamy fish curries and beans baked in coconut milk. Mainland nuts are more expensive due to high transportation costs.

Zanzibar and the rest of Africa are becoming more urbanized, as evidenced by the cutting down of coconut trees. Sprawl is the defining characteristic of Africa's burgeoning cities; these metropolis are spreading outwards rather than rising. People that move to new plots in Zanzibar City's expanding urban area cut down the coconut palms to create room for their new residences.

Also, a lot of island hotels and some homes feature furniture fashioned from coconut wood. Carpenter Emmanuel Elias explains that it is less expensive than imported substitutes. Farmers are prohibited by law from cutting down fruit-bearing trees for furniture, but it is difficult to stop them in reality. Even those who follow the regulations avoid planting new trees because they take at least six years to bear fruit and fifteen years to achieve their peak yield. State seedling subsidies haven't been able to keep up with the increase in urban population.

A stylish dressing table that Mr. Elias is selling for 400,000 shillings gets dusted off in his workshop. He draws attention to the distinctive black specks inside the grain that distinguish coconut wood. He claims, "This is the land of coconut trees." How much longer, though? *(The Economist)*

COCONUT FARMERS SEEN TO BENEFIT FROM TISSUE CULTURE TECH

In order to assist coconut farmers in achieving better and higher yields, the Philippine Coconut Authority (PCA) emphasized that developing innovative sustainable and climate-resilient techniques of coconut production is a primary goal.

During the Davao Region Coconut Conference and Trade Summit, PCA deputy administrator

Roel Rosales stated that the method of growing coconuts through tissue culture is almost complete and will greatly benefit farmers.

"The tissue culture is comparable to the way we grow bananas, where a single tissue can yield numerous planting materials. With the right selection, you'll be able to obtain the source's precise genetic characteristics, he explained.

Plant tissue culture (TC) was defined by the International Service for the Acquisition of Agri-biotech Applications as the cultivation of plant cells, tissues, or organs on specially designed nutrient media. A single cell can be used to regrow an entire plant under the appropriate circumstances.

Rosales noted that at least 200 tissues have been produced as a result of their research with the Department of Science and Technology (DOST). Rosales added that Mexican research had demonstrated that tissue could generate thousands of planting materials to support his claim.

He added that they are currently in the final stages of the research and that it can produce several hundreds from just one tissue from the nut itself.

"We have tested trees made with the aforementioned technology that are already present on the field. Rosales expressed optimism that these would be commercialized and made available in the upcoming years.

Rosales stated that in order to lessen the effects of climate change, PCA and other concerned organizations have switched to more practical and sustainable farming methods.

The benefits of coconut trees for carbon sequestration have been demonstrated. In terms of intervention, we are moving toward more efficient and sustainable farming methods. Particularly in disaster-affected areas, we are less dependent on inorganic fertilizer, he emphasized.

Rosales added that because the market wants and needs organic products, the coconut industry is currently transitioning to them.

"We resumed using salt. We are also promoting the idea that farmers should process their farm waste, the speaker said.

Rosales stated that the Bureau of Soils and Water Management will support efforts to promote zero waste management in agriculture.

Through the passage of Republic Act (R.A.) 10068, also known as the Promotion and Development of Organic Agriculture in the Philippines, the nation began to acknowledge the significance of organic farming in 2010.

Former President Rodrigo Duterte approved R.A. 11511 as an amendment to R.A. 10068 in order to advance organic farming and community-based organic agriculture systems. (*SunStar*)

NEERA TAPPING RULES ARE LIKELY TO BE RELIEF FOR TAMIL NADU COCONUT FARMERS

To the advantage of coconut farmers, the Department of Agriculture and Farmers' Welfare is considering relaxing the Tamil Nadu Neera Rules.

The Director of Agriculture Marketing and Agri Business attended a meeting in this regard last month. The Manu Neethi Foundation's founder, Athappa Manickam, made a presentation, and the meeting discussed some rule changes in response.

In addition to calling for provisions to allow for online neera license applications, Mr. Manickam suggested that the 5% cap on the total number of coconut trees be lifted. The Coconut Producers Company does not need to be registered with the Coconut Development Board, he added. These were discussed at the meeting, where the government recommended that the Agricultural Marketing and Agri Business Department set

up procedures so that those who wish to apply could do so online and receive the necessary licenses. Additionally, it stated that the Coconut Producer Companies could register with the Coconut Development Board in order to take advantage of the Board's benefits without having to do so in order to obtain a license. The government is considering increasing the number of trees that can be tapped from the current 5% to 25%.

Within a month, the government is anticipated to issue an order that will help coconut farmers and producer firms. Companies that produce coconuts may apply online and harvest neera from 25% of the trees if the order is granted. They will appreciate this action, according to Mr. Manickam. (*The Hindu*)

BEST FOR SAP PRODUCTION COCONUT HYBRID

PCA 15-10, developed by the Philippine Coconut Authority, is a hybrid between the "Tacunan Dwarf" and "Laguna Tall" coconut varieties. Its nuts have a significantly thicker girth, strong vegetative growth, and are much more robust. According to a DOST-PCAARRD post on the Philippine Coconut Authority's Facebook page, it is best suited for the production of coconut sap products like coconut sugar, coconut honey, coconut sap juice, and coconut vinegar (PCA). Department of Science and Technology-Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development, or DOST-PCAARRD, is the organization's full name.

Two nurseries were established in Quezon Province to handle the hybrids before field planting as part of a project between DOST-PCAARRD and PCA. This project is producing massive quantities of PCA 15-10 planting materials. According to a recent report, the project was able to provide 7,660 PCA 15-10 hybrids to 50 farmers in about 30 municipalities in the CALABARZON and 2 municipalities in the MIMAROPA regions, totaling about 70 hectares. (*UCAP Bulletin*)

A LIVELIHOOD OPPORTUNITY IS OPENED BY COCONUT WASTE MATERIALS

The use of coconut waste materials has allowed craft maker Jeeff De Asis to make a living. The chief tanod of Barangay Carit-an in the municipality of Patnongon, who makes crafts out of waste materials from coconuts, shared last week how he started his journey of doing so and how it helped him increase his income.

De Asis was invited to perform a coco craft demonstration at the Obre Antiqueo Trade Fair at the Robinsons Mall that week by the Department of Trade and Industry (DTI) Antique provincial office. On November 20 in Iloilo City, he demonstrated how to make a "hantic," or red ant lampshade made of coconut shells that took home the prize for Most Innovative Product at the 2022 Panubli-on Heritage Fair. In honor of his native province of Antique, which gave the lampshade its name, he claimed to have been motivated to shape it into an ant.

He claimed that in order to have startup funding and training, craft makers like himself require assistance from the federal government through the DTI and the Department of Social Welfare and Development (DSWD). He has taught his in-laws to make key chains, refrigerator magnets, and cellphone holders with the craft so that they can now support themselves. He hoped that the six to seven barangay residents he also trained would be able to use the DTI's Shared Service Facility or the DSWD's Sustainable Livelihood Program to support the company. (*UCAP Bulletin*)

JOHOR WILL EXPAND COCONUT TREE CULTURE

According to a report, the government of Johor intends to expand the cultivation of coconut trees in the Malaysian state by developing an area of 1,325 hectares, with the goal of producing 124,313 tons of the fruit by 2027. The coconut seed production center managed by the state agriculture department will also have more authority to increase seed production in the

Malaysian state, according to Datuk Zahari Sarip, chairman of the state agriculture, agro-based industry and rural development committee.

"The state government plans to focus on this crop for the next five years in order to meet the country's coconut needs and maintain Johor as the main producer," he said at the State Legislative Assembly meeting at the Sultan Ismail Building, Kota Iskandar. This was his response to Datuk Jefridin Atan's query regarding the state government's program to assist farmers in raising coconut production in Johor.

Despite Johor being the nation's top producer of coconut seeds, according to Zahari, the amount produced falls short of the estimated 53,000 seeds needed annually. He also noted that the Jorak Agriculture Center's (Coconut Seed Supply Center's) production capacity is roughly 28,000 seeds annually. (*UCAP Bulletin*)

TRADE NEWS

INDUSTRY PERSPECTIVE

Prices improved after a bearish start this week but generally weakened.

The Rotterdam coconut oil market was unremarkable this week despite showing improved activity that enabled deals to be closed at \$1,135-1,180/MT CIF. With sellers quoting \$1,140-1,190/MT CIF for positions from December/January through July/August 2023, the market opened bearishly, influenced by weakness in palm oil. On the basis of encouraging signals from palm oil, prices then fluctuated but kept their price range above opening values. Mostly positive closing range for the market was \$1,150-1,220/MT CIF.

After last week's strong business, the palm kernel oil market was once more underwhelming. Only one trade was reported for the week, completed at

a price of \$1,040/MT CIF, below the \$1,100–1,135/MT traded last week. The market initially moved in line with the trend in the price of coconut oil, which was bearish, with offers at \$1,000–1,105/MT CIF for positions from December/January through July/August 2023. Prices ranged from \$1,055 to 1,120/MT CIF at the close.

After six weeks of constant price declines, the spread between coconut oil and palm kernel oil widened this week, rising from last week's \$82.67 to an average of \$92.17/MT. With the exception of two positions, premiums per position were higher today than they were a week ago, as shown below: No data for November or December (\$37.08 last week); for December and January, \$82.50 (\$79.62); for January and February, \$96.25 (\$90.50); for March and April, \$89.50 (\$87.50); for May and June, \$90.00 (\$90.25); for June and July, \$98.00 (\$95.50); and for July and August, \$84.58 (\$90.83).

Soybean futures at the CBOT Soya Complex market increased after a sluggish start attributed to fewer export inspections. Forecasts for dry weather in Argentina's crop-growing regions contributed to the market's reversal. Higher crude oil prices and improved export prospects as a result of China's relaxation of Covid-19 policy restrictions also provided support. However, during the week leading up to the weekend, worries about a global recession briefly stopped the rally.

As a result of falling CBOT soybean oil futures, the market for palm oil initially fell, but quickly recovered thanks to buyers looking for a deal. After that, the market kept moving upward in line with the recovery of soybean oil and closed on the upside due to worries about supply in 2023 due to bad weather and anticipated supply disruptions as a result. Before the close, however, there was a brief decline amid concerns about how the global recession would affect the market.

Lauric oils' price recovery from last week's decline was evident in tropical oil prices for the closest forward shipment. Palm kernel oil increased marginally by \$0.62 from \$1,084.38

to \$1,085.00/MT CIF, while coconut oil increased by \$3.50 from \$1,164.00 to \$1,167.50/MT CIF this week. In contrast, palm oil continued to be in the red, suffering sharp losses of \$54.50 from a level of \$1,037.50 to \$983.00/MT CIF. As a result, the price difference between coconut oil and palm kernel oil increased from \$79.62 last week to \$82.50/MT this week, as well as from \$126.50 to \$184.50/MT for palm oil. (*UCAP Bulletin*)

CONSUME OF COCONUT OIL'S MARKET

Following a week of moderate activity, the coconut oil market in Rotterdam was a dull affair. Market values were higher than opening rates after a lower opening price. At the close, the sellers' quotes for December/January were \$1,185; for January/February and February/March, they were \$1,155; for March/April, they were \$1,150; for May/June, they were \$1,170; for June/July, they were \$1,200; and for July/August, they were \$1,220/MT CIF. Despite asking \$1,050 for January/February, \$1,095 for February/March, \$1,110 for March/April, \$1,120 for April/May, \$1,125 for May/June, \$1,130 for June/July, and \$1,135/MT CIF for July/August, buyers closed quietly for the front position.

Market for FOB coconut oil remained shut. (*UCAP Bulletin*)

COCONUT EXPORTS TEST BY JP FARMS

During a recent tour of the company's lands in Annotto Bay, St. Mary, general manager Mario Figueroa stated that JP Farms Jamaica has been exporting to a customer in Connecticut, USA, but that there are plans to increase the trade of the nuts into the rest of North America.

The Honduran continued, "This opportunity came about because we have some customers who want specific products — [yellow] yams, plantains, and pineapples.

And since we started in the Diaspora and are open to serving customers, we are currently investigating that, he continued.

Currently, the business loads a pallet with 10 to 12 perforated bags of coconuts before placing them in containers for export. Although the business has tried other forms of packaging, it has discovered that the mesh bag allows for proper aeration of the coconuts and thereby prevents spoilage.

The coconuts go through the same export-ready preparation steps as other farm products, including washing, grading, selection, post-harvest treatment, and cold room storage, claims Tariq Kelly, the crop manager at JP Farms. In order to have a week's shelf life once they arrive in the US, this enables the coconuts to last for three weeks.

It took a lot of trial and error to try to get to the ideal product, he admitted, because sending fresh produce is more difficult than sending processed goods.

"When selling something locally, you must make sure it lasts for at least a week and a half. Therefore, when exporting, it must still be on the shelves and reach the customer after two weeks in perfect condition. Therefore, in order to maximize exports, you must overcome these obstacles" Kelly went on.

When asked about dried coconuts that had been peeled, Kelly said JP Farms had conducted tests but would need to buy the equipment needed to do so. The demand for jelly coconuts is also rising.

The company wants to harvest 1,500 to 2,000 nuts per week for export sustainably, but Kelly said that JP Farms has struggled to find enough workers because of factors like rural-to-urban migration and an aging population, among others.

Over 1,000 coconut trees on more than 50 acres of farmland are harvested by JP Farms in St. Mary. Over 5,000 nuts can be harvested from this in a single week.

Due to an increase in demand from customers in the US, the company obtained its export license

from the Jamaica Agricultural Commodities Regulatory Authority earlier this year. He added that a distributor from a different market also expressed interest in jelly coconuts. (*Jamaica Observer*)

OTHER VEGEOIL NEWS

PALM OIL COMPANIES IN INDONESIA TO SPEND MONEY ON EDUCATION

According to the Indonesian Palm Oil Association (GAPKI), many palm oil producers in the nation have already made investments in the education sector as part of their initiatives to raise the standard of labor in the nation. According to data from Statistics Indonesia (BPS), the palm oil industry employs roughly 16 million people both directly and indirectly.

Sumarjono Saragih, the head of GAPKI's Manpower Division, stated that the development of school buildings, scholarships, and other educational facilities and assistances are just a few of the ways that palm oil companies help the education sector. These assistances are provided through their respective Corporate Social Responsibility (CSR) programs or through the oil palm plantation fund management board (BPDPKS).

PT Astra Argo Lestari Tbk, Wilmar Group, PT Austindo Nusantara Jaya Tbk, state-owned holding company Perkebunan Nusantara (PTPN), and Tunas Sawa Erma (TSE) Group are some of the palm oil companies he mentioned that have made investments in the education sector. For instance, in several schools, PT Astra Argo Lestari Tbk offers support in the form of scholarships for deserving students and rewards for teachers. Wilmar's support comes in the form of a Rp60 billion budgetary allotment for the construction of 15 schools, including kindergartens, elementary, junior, and senior high schools, all around its plantation areas. (*UCAP Bulletin*)

NEW OLIVE OIL QUALITY AND LABELING RULES ARE INTRODUCED BY EUROPE

New rules governing the quality and labeling of olive oil had been introduced by the European Union (EU). The Delegated Regulation 2022/2104 and Implementing Regulation 2022/2105, which were introduced at the end of November and published in the official journal of the EU, combine earlier regulations to increase efficiency and create a more uniform EU olive oil market, according to the report.

According to the European Commission (EC), "the experience acquired over the last decade (shows that certain aspects of the regulatory framework need to be simplified and clarified)," a thorough update was required. According to the EC, olive oil's quality, especially its chemical and organoleptic profiles, set it apart from other vegetable and seed oils, and these characteristics increased the importance of fraud preventions.

The International Olive Council (IOC), of which the EU is a member, developed protocols for the analysis of olive oil profiles that mandate the use of panels of carefully chosen and skilled tasters. The new integrated labeling regulations from the European Commission call for labels that are both highly visible and simple to read and that disclose the contents of the product. The EC recommended that labels also include information about how the product should be stored because "numerous scientific studies have demonstrated that light and heat adversely affect the quality of olive oil." The "age of the product" and the product's origin should both be listed on the labels. (*UCAP Bulletin*)

30% OF INDIA'S CONSUMER OF EDIBLE OIL COMES FROM GM SOURCES

According to experts, sources that are directly or indirectly produced from genetically modified (GM) crops account for about 30% of India's estimated annual consumption of edible oils. These include both imported and domestic

cottonseed oils, the majority of which are made from GM cotton, according to sources in the trade and industry.

India uses about 23 million MT of edible oils annually, according to a senior industry official. Of this, 10–11 million MT are sourced domestically and are largely GM-free, with the exception of cottonseed oil, which is produced at a rate of 1.0–1.1 million MT annually. Around 8 MT of imported edible oils are palm oil, which is completely GM-free.

However, the remaining imported edible oils—soybean oil and sunflower oil—come primarily from seed made using genetically modified (GM) methods. BV Mehta, director general of the Solvent Extractors' Association of India, stated that approximately 5–7 million MT of the approximately 23 million MT of edible oil consumed annually in India comes from GM sources (SEA). (*UCAP Bulletin*)

INDONESIA MIGHT USE THE B35 BIODIESEL BLEND AS EARLY AS 2023

According to a senior energy ministry official, Indonesia may begin implementing a program using biodiesel with a 35% blend of palm oil-based fuel, known as B35, as early as 2023. The top palm oil producer in the world at the time used B30.

With hopes that the price of crude oil will remain high in 2019, Indonesian President Joko Widodo instructed his cabinet to get the B35 implementation mechanism ready. The total allotment of palm oil-based fuel for 2023 is predicted to be around 13 million kiloliters. The allotment for 2022 was 11.03 kiloliters.

The energy ministry has been testing biodiesel with 40% palm oil-based fuel in the interim. A blend of diesel with 40% fatty acid methyl ester (FAME) and a blend of diesel with 30% FAME and 10% green diesel made of refined, bleached, and deodorized palm oil are the two B40 formulations that are being tested. (*UCAP Bulletin*)

HEALTH NEWS

5 WAYS TO ENSURE COCONUT OIL IS PURE AT HOME

Coconut oil is a favorite among many people because it is natural, healthy, and highly versatile. Coconut oil, which is high in antioxidants, is thought to have anti-inflammatory and anti-microbial qualities. Coconut oil is the greatest fat you can incorporate in your diet on a regular basis, protecting your skin, hair, and teeth. But if we look at coconut oil that is sold commercially, we'll see that it frequently undergoes adulteration, which is difficult to spot with the human eye. Here's how to check the purity of coconut oil at home if you use it frequently.

Heat test

Place a pan over medium flame and heat a small amount of coconut oil in it. If it starts frothing at a low temperature and gives out a burnt smell, it is impure.

Fridge test

Place a tiny quantity of coconut oil in a bottle and chill it for one hour. If it is adulterated, the adulterant will float on top of the coconut oil's solid layer.

Freezing test

One of the simplest tests to perform at home to determine the quality of coconut oil is this one. Simply take a glass of water and add 2 tbsp of coconut oil to it. Check to see if the oil is melting or hardening after 20 to 30 minutes. You have phony or adulterated coconut oil if the oil is melting and combining with the water. On the other hand, if it congeals or solidifies, you have pure coconut oil.

Smell & taste test

You only need to smell it first and put some oil in your mouth for this test. Pure coconut oil will have a wonderful aroma and flavor. However, the moment you put it in your mouth, you will be able to tell if it is tainted.

Colour test

If you frequently use coconut oil, you can quickly tell if it has been tampered with by looking at it. While pure coconut oil is practically transparent, adulterated coconut oil has a slight yellow tint. Another option is to put some oil in a container and leave it sit for ten minutes or so. The coconut oil you are using is pure if it seems translucent. Additionally, impure coconut oil will have a slightly hazy or blurry appearance, indicating the presence of contaminants. (*Times of India*)

8 REASONS WHY YOU SHOULD START EATING THIS SUPER FOOD: COCONUT EMBRYO BENEFITS

The coconut embryo, sometimes referred to as sprouting coconuts, coconut pearls, or coconut apples, is a beloved food in many countries. The coconut embryo, despite its unappealing moniker, is a whitish, spongy object found inside mature coconuts.

Description the Coconut Embryo

The exocarp, or smooth, green outer layer of the coconut, is harvested during this time. Then, the mesocarp, a fibrous brown husk, is peeled off to reveal the coconut shell. The endocarp is in charge of safeguarding the white fruit.

When a coconut is overripe, it can sprout and become a germinated coconut. Once the seed inside the shell has sprouted, it starts to ingest water and turns into a dense, spongy mass. When you open it, you won't see the coconut

apple's hollow, watery center; instead, you'll see the embryo, a sizable, yellowish mass.

What Advantages Do Coconut Embryos Offer?

More research is needed on the health advantages listed below, which are based on its composition. The advantages of consuming coconut embryo for health are as follows:

1. Since coconut embryos are naturally antiviral, antibacterial, antifungal, and antiparasite, eating them strengthens the immune system.
2. It shields your skin and hair from the sun and guards against age spots, wrinkles, and sagging skin.
3. It improves physical and athletic performance and offers a natural source of fast energy.
4. The digestion and absorption of nutrients, vitamins, and minerals are improved by coconut embryos.
5. It might help to lessen diabetes-related symptoms and insulin secretion.
6. By lowering insulin levels and removing free radicals that can cause premature aging and degenerative diseases, it may help guard the body against cancer.
7. The chemical makeup of coconut embryo may help to lower the risk of heart disease and increase healthy cholesterol (HDL)
8. The coconut embryo offers defense against bladder and kidney infections.
9. Coconut embryos can be used to lose weight.

How To Eat A Coconut Embryo?

After being opened, coconut embryos are at their finest when consumed uncooked. If the embryos are cooked, the experience's light, airy quality will be lost.

If you would rather, you can use the cubes to add more taste variation to fruit salads or just eat the center with a spoon.

It can be baked or blended into a variety of meals. *(Bolsky)*

COCONUT RECIPE

COCONUT MACAROONS

Ingredients

1. 14 ounces sweetened shredded coconut
2. 14 ounces sweetened condensed milk
3. 1 teaspoon vanilla extract
4. 2 jumbo eggs (whites only – discard the yolks)
5. ¼ teaspoon sea salt

Directions

Preheat oven to 325 degrees and line 2 large baking sheets with parchment paper.

Combine the coconut, condensed milk, and vanilla in a large bowl. Whip the egg whites and salt on high speed in the bowl of an electric mixer to medium-firm peaks. Do not overbeat the egg whites as they will deflate when you attempt to fold them into the coconut mixture. Carefully fold the egg whites into the coconut mixture. Drop the batter onto sheet pans lined with parchment paper using either a 1 and 3/4-inch diameter ice cream scoop, or 2 teaspoons. Bake for 25 to 30 minutes, until golden brown. Cool and serve.

(CBS News)

STATISTICS

Table 3. Indonesia's Monthly Exports of Coconut Oil (in MT), 2020 - 2022

Month	2020		2021		2022	
	Volume (MT)	Value (FOB) US\$'000	Volume (MT)	Value (FOB) US\$'000	Volume (MT)	Value (FOB) US\$'000
January	56,440	47,671	41,112	58,282	35,566	67,128
February	46,030	41,364	54,471	78,304	48,846	92,391
March	46,854	41,439	42,893	63,982	71,557	141,347
April	46,063	39,796	43,675	65,594	53,934	110,914
May	35,782	29,483	66,712	105,704	61,688	119,512
June	52,717	45,326	48,582	78,866	57,845	104,471
July	66,368	56,217	71,449	113,089	81,933	132,914
August	35,509	32,054	39,908	62,834	56,776	83,469
September	30,193	29,969	47,107	70,877	61,498	76,363
October	45,747	46,675	42,489	67,385	61,949	68,485
November	44,483	50,805	57,478	95,763	46,880	49,688
December	50,872	67,088	55,571	98,543		
Total	557,059	527,887	611,448	959,223	638,472	1,046,683

Source: BPS-Statistics Indonesia

Table 4. Philippines's Monthly Exports of Coconut Oil (in MT), 2018 - 2022

Month	2018	2019	2020	2021	2022
January	83,573	76,557	115,346	52,302	97,009
February	35,743	44,265	59,757	53,704	123,579
March	82,848	122,223	91,762	72,143	97,741
April	69,532	123,057	53,629	58,555	123,835
May	68,968	100,580	61,034	51,927	113,696
June	99,482	135,308	92,625	65,091	87,170
July	46,825	94,690	19,161	78,441	112,646
August	72,360	197,300	85,963	80,111	104,713
September	93,124	75,126	83,382	82,648	78,818
October	80,655	100,758	58,911	93,101	
November	126,627	67,636	63,150	95,115	
December	94,487	101,826	55,353	97,947	
Total	954,224	1,239,326	840,073	881,085	939,207

Source: Philippine Statistics Authority

Table 5. International Prices of Selected Oils, September 2019 - August 2022, (US\$/MT)

Year	Month	Coconut Phil/Indo (CIF. Rott.)	Soybean Oil Dutch (FOB ex-mill)	Palm Oil Malaysian (CIF. Eur.)	Palm Kernel Oil (CIF. Rott.)	Sunflower Oil EU (Fob. NW. EU)
2020	January	1,062	874	835	955	807
	February	875	800	729	802	823
	March	834	748	635	689	730
	April	840	680	609	721	732
	May	831	684	574	678	738
	June	920	752	652	761	788
	July	886	821	659	704	833
	August	954	867	703	756	877
	September	1,034	906	741	788	1,041
	October	1,105	915	758	801	1,040
	November	1,380	974	918	1,073	1,176
	December	1,459	1,023	979	1,193	1,241
2021	January	1,463	1,099	990	1,368	1,276
	February	1,445	1,124	1,020	1,360	1,363
	March	1,541	1,285	1,030	1,479	1,611
	April	1,660	1,386	1,078	1,487	1,573
	May	1,715	1,575	1,136	1,531	1,585
	June	1,671	1,518	1,004	1,400	1,297
	July	1,584	1,468	1,063	1,274	1,282
	August	1,494	1,434	1,142	1,341	1,356
	September	1,485	1,399	1,181	1,427	1,310
	October	1,923	1,484	1,310	1,818	1,421
	November	1,961	1,443	1,341	2,050	1,416
	December	1,696	1,411	1,270	1,861	1,362
2022	January	2,033	1,470	1,345	2,196	1,412
	February	2,153	1,596	1,522	2,443	1,499
	March	2,269	1,957	1,777	2,441	2,361
	April	2,097	1,948	1,683	2,064	2,276
	May	1,720	1,963	1,717	1,811	2,079
	June	1,688	1,752	1,501	1,555	1,885
	July	1,517	1,533	1,057	1,301	1,557
	August	1,364	1,599	1,026	1,173	1,496
	September	1,261	1,548	909	1,249	1,305
	October	1,094	1,576	889	1,039	1,359
	November	1,167	1,652	946	1,062	1,347
	December	1,155	1,409	940	1,067	1,234

Source: Cocommunity and Oil World

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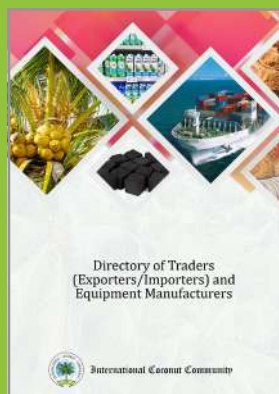
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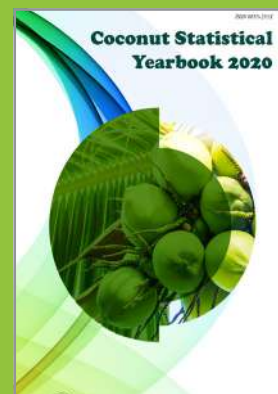
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DESICCATED COCONUT PROCESSING MACHINERY

"Over 100 machines in operation worldwide"



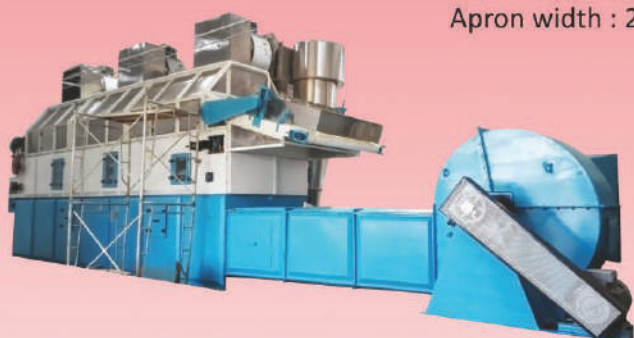
BAND DRYER (APRON/CONTINUOUS TRAY DRYER)

for Desiccated Coconut Granules, Chips & Toasted D/C

Output Capacity : 1000 to 2500 Kgs/hr.

Two Stage and Three Stage Dryers.

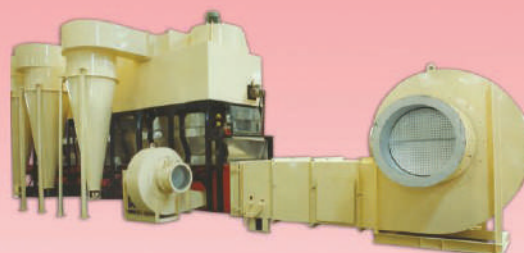
Apron width : 2640mm and 3250mm



COMBINATION DRYER

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

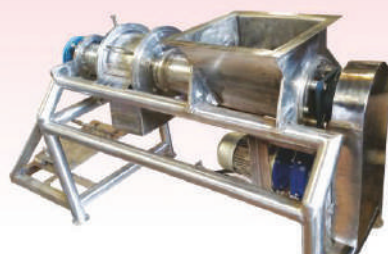
Output Capacity : 300 to 1000 Kgs/hr.



VIBRATORY FLUID BED DRYER

for Desiccated Coconut Granules & Parings.

Output Capacity : 300 to 1000 Kgs/hr.



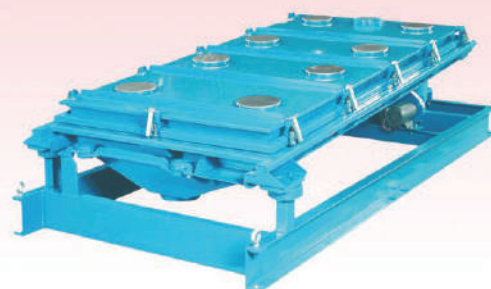
GRINDER

Output Capacity:
1000Kgs/hr.



BLANCHER

Output Capacity :
1000 to 4000 Kgs/hr.



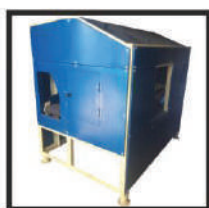
NOVATEX SCREENER/GRADER

Output Capacity :
1000 to 1500 Kgs/hr.



DESHELLING MAHINE

Output Capacity :
250 to 300 nuts/hr.



DEHUSKING MACHINE

Output Capacity :
1200 nuts/hr.



OIL EXPELLER



RADIATOR Extruded Fins or Plate Fins Type



STAINLESS STEEL PERFORATED APRON TRAYS

Width: 2640mm & 3250mm



STAINLESS STEEL CHAIN



GEMTECH PROJECTS LLP.

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BY AIR MAIL

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

Established in 1969, under the auspices of the United Nations Economic and Social 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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