

Riding on coconut to reach the destination of sustainability

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The Coconut Community across the globe were going nuts over coconut during the last week of August; the global celebrations of World Coconut Day on September 2nd was not the reason and all talks were leading to the wonder crop, be it cultivation or processing or trade or health benefits of coconut. This was the stage set during the launch of the COCOTECH Conference which was organized by the International Coconut Community (ICC) as a virtual event during 30th August to 2nd September 2021.

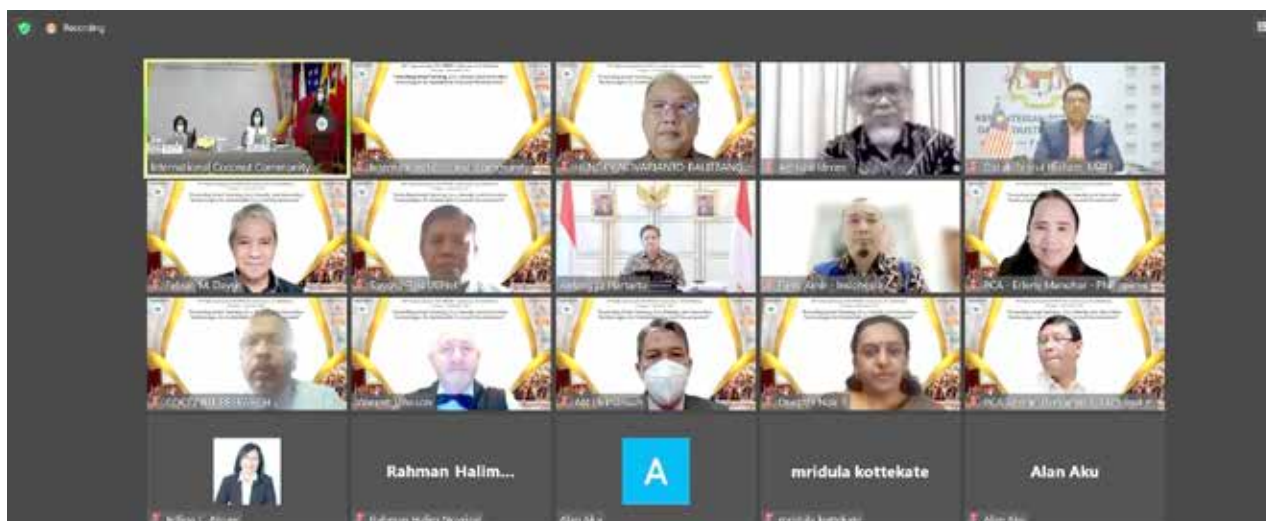
COCOTECH, organized once in two years by ICC, is an event that the stakeholders in the global coconut sector look forward to, since it brings together the experts across the globe and sharing of technologies, ideas, market prospects etc occur to the benefit of the stakeholders. The 49th International COCOTECH Conference and exhibition was organized virtually from Jakarta on the theme : Promoting Smart Farming, Eco-Friendly and Innovative Technologies for Sustainable Coconut Development. The theme was well in accordance with the Sustainable Development Goals.

Since the Conference was organized virtually owing to the pandemic situation, it also enabled increased participation from across the globe. Around 742 stakeholders from the global coconut sector had participated in COCOTECH Conference from around 43 countries, the highest numbers ever recorded in COCOTECH. And indeed it is really great to know that so many people are interested in coconut. The exhibition organized alongside COCOTECH was also an eye opener for many since it showcased various products from coconut; the products in display came from around 45 firms across 9 countries.

Indonesia being host to the ICC led the start of the Conference with key note address and opening remarks delivered by His Excellency Honourable Airlangga Hartarto, MBA M.M.T. IPU, Coordinating Minister of Economic Affairs of the Republic of Indonesia The programme was arranged in seven sessions with each session concentrating on one topic of utmost priority to the sector.

Session 1 : Policies & Programs Promoting Sustainable Coconut Development

The session was intended to create awareness about the policies and programmes implemented in the major coconut growing countries for promoting sustainable coconut development. This session is always found useful for policy makers and development officials who can replicate ideas implemented successfully after suitable fine tuning of the same with the local scenario. The first paper was presented on the National Program and Policies for the Sustainable Coconut Development in the Philippines by Mr. Benjamin R. Madrigal Jr., Administrator, Philippines Coconut Authority, Philippines. He presented the outlook envisaged for the coconut sector and the seven thematic recommendations towards a resilient, secure, sustainable and globally competitive coconut industry with empowered and prosperous farmers. He explained about the Farmers registry and its updation undertaken in the Philippines. He gave a brief outline on the developmental activities undertaken for the coconut sector in the Philippines. This was followed by a presentation on the “Strengthening National Program on Coconut Revitalization in Indonesia” by Dr. H. Syahrul Yasin Limpo, S.H. M.Si, M.H., Minister of Agriculture, Republic of Indonesia. The policy initiatives for the plantation sector in the country was explained in detail which included the 1000 cultivation village, production acceleration and added value strategy and Coconut Area Corporate Development Concept. The increasing potential and prospects for the coconut industry should be matched with sustained supply of raw material in adequate quantity and quality. The third presentation was on “Managing Coconut Supply Stability, Cost and Quality in a Smart Farming System” which was presented by Mrs. Deepthi Nair.S., Deputy Director, Coconut Development Board, India. The importance of sustainable coconut development and the need to maintain supply stability, managing cost and quality so as to cope up with the increasing demand from industry was explained.

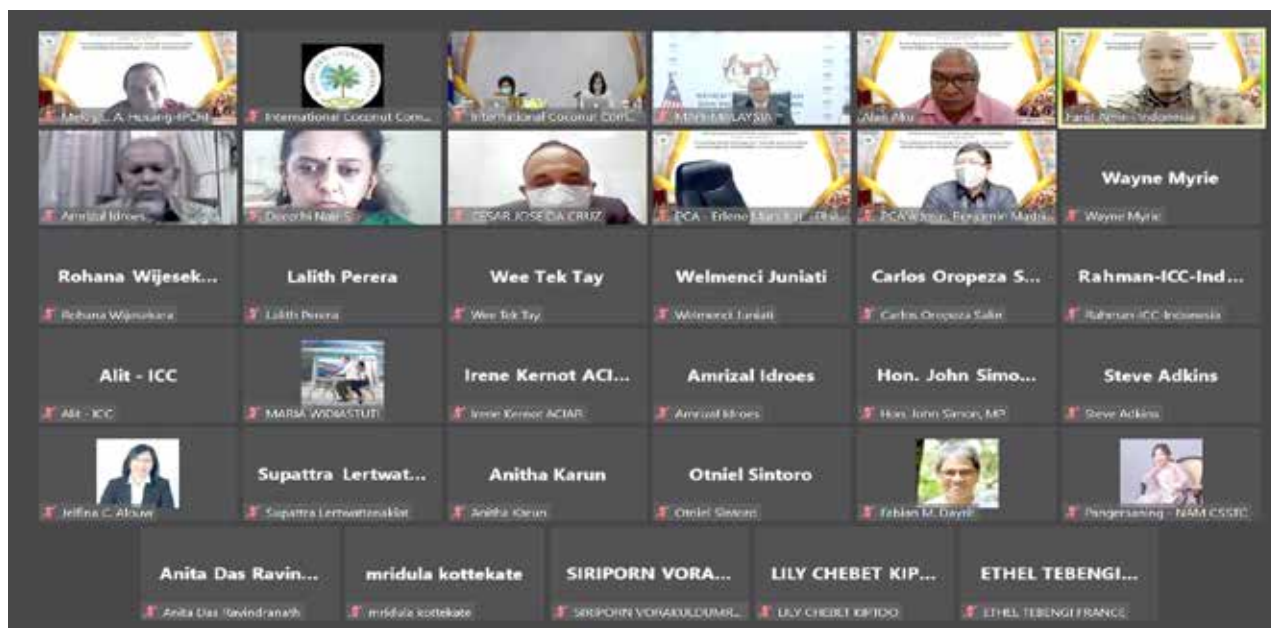


Session 2 : Recent Scientific Evidence on Health Benefits of Coconut Based Products

The needs of the market and the consumers are increasing with every passing day. Health claims on consumer products cannot be justified with anecdotal evidences but need to be supported by scientific evidences. The topic presented by Dr. Fabian M. Dayrit, Professor, Department of Chemistry, Ateneo de Manila University and Chairman ICC Scientific Advisory Committee on Health, Manila, Philippines was very much apt for the times in which we are living now – “Does Coconut Oil Have a Role against Covid-19?” Dr. Dayrit started by explaining the uneven and uncertain Covid situation. The pharma strategy against Covid comprises mainly of antiviral strategy through repurposed drugs, immunity through vaccines and anti-inflammatory strategy through steroids. He detailed on the scientific studies undertaken on effectiveness of VCO in lowering the C reactive protein levels and other health benefits. He further explained the stages in which VCO could provide positive benefits and detailed about the ICC solidarity trial. Dr. Ralph Martins, Foundation Professor and Inaugural Chair in Ageing and Alzheimer’s Disease, School of Medical Science, Australia presented “Updates on Coconut-Based Products and Alzheimer’s Disease”. He explained the trials undertaken using MCT oil from coconut, the assessments studied including cognitive and the improved results obtained. Mr. Shashank Garg, GEMTECH Projects LLP, Kolkata, India gave a brief overview about the processing of coconut through a video and presented about the various machinery for coconut processing produced by his firm.

Session 3: Enhancing Competitiveness of Coconut Base Products in the Era of Volatility, Uncertainty, Complexity and Ambiguity (VUCA)

Quality, traceability, certification, trade integration etc are crucial in today’s marketing scenario due to increasing competitiveness and innovation. The market is very much volatile and uncertain and the preferences change fast and have little life which makes innovation and convenience the major requirements to sustain in the business. “Importance of Quality Standards and Product Certification for Potential Marketing of Coconut Products” was the first topic in this Session which was presented by Dr. C. Anandharamakrishnan, Director, Indian Institute of Food Processing Technology (IIFPT), Ministry of Food Processing Industries (MoFPI), Government of India. He explained the growth potential for value added products of coconut and the relevance of quality adherence for the processed products. He stressed the need for risk assessment in the production chain and explained the various quality standards and certification systems currently in vogue. The next presentation on “Coconut Oil as Feedstock of SAP (Sustainable Aviation Fuel): Potential, Challenges and Strategies for Future Development” by Dr. Suyoto Rais, Chairman, Indonesia-Japan Business Network, Jakarta was indeed a revelation to the participants of an added use of coconut oil as aviation fuel, which was totally an out of the box thought. He explained that the efforts were oriented towards reduction of carbon dioxide emissions in aviation industry which included sustainable aviation fuel too. He explained the suitability of coconut oil as aviation fuel and suggested that the rejections by processing units or non-standard coconuts could be used.



The relevance of organic certification in the path of sustainability is becoming increasingly significant. The talk on “Organic Coconut Plantation and Products: Challenges and Opportunities to Enhance Competitiveness in Global Market” was presented by Mr. Gerd Waldkircher, PT. Bionesia Organic Foods, Indonesia. He explained the importance of organic farming and the certification process. The market potential for organic products of coconut in the near future was also discussed. Ms. Witada Anukoonwattaka, Economic Affairs Officer, Trade Policy & Facilitation Section, Investment & Innovation Division UNESCAP presented on “Online Tool for Visualizing and Analyzing Trade Integration (RIVA Value Chain Analysis)” which was an interesting area especially for those in trade. She gave a good understanding on Regional Integration and Value Chain Analyser (RIVA) and how to know the involvement of a country in the global value chain. She presented a demonstration on the use of RIVA in marketing decisions which was very informative to all in decision making.

Session 4 : Advanced Technologies for Supporting Adequate Supply of Raw Materials to Meet Current and Future Demand for Coconut Based Products

Rapid multiplication techniques in coconut is yet to reach a phase where millions of plantlets of good quality could be distributed. Discussions and deliberations on where each country stands in research in in-vitro-propagation is important to prevent countries making investments in kind

and human resource for re-inventing the wheel. “Clonal Propagation of Elite Coconut Cultivars using Axillary invitro Shoot Multiplication” was the topic in which Dr. Bart Panis, Senior Scientist, Alliance of Bioversity International CIAT, Belgium made his presentation. He briefed on the project undertaken from shoots of germinating embryos where embryos were sourced from Philippine Coconut Authority. He explained the advantages of the method and the way forward. The talk on “Potency and Challenges of Coconut Micropropagation” was presented by Dr. Steve W. Adkins, Expert in Plant Physiology, Queensland, Australia. He gave a brief picture of the history of coconut micropropagation and the various pathways followed. The issues identified including tissue browning, inefficient proliferation and low regeneration were discussed. He stressed on the need to identify varieties to be propagated based on the end use.

Dr. Carlos M. Oropeza Salin, Senior Researcher, Centro de Investigación Científica de Yucatán (CICY), Mexico presented on the topic “Coconut Micropropagation: Strategy to Meet Global Demand”. HE explained the micropropagation protocol undertaken by CICY which was implemented in field and the plants have started fruit setting. He called for regional collaboration in order to attain self sufficiency in planting material production. The topic “Prerequisite for the Success of Coconut Micro Propagation Through Tissue Culture” was presented by Dr. Anitha Karun, Acting Director and Breeder, ICAR- Central Plantation Crop Research

Institute (CPCRI), Kerala, India. She explained in detail about the work undertaken in tissue culture and the various possibilities explored which include coconut zygotic embryo culture, plumule culture, anther culture, unfertilized ovary culture, embryonic shoot meristem culture etc and tissue culture with large inflorescence and immature inflorescence. She conclude with the brief account of the determinants contributing to the success of tissue culture. This was followed by a brief presentation by Mr. Viraj Bagaria, Director, T & I Global, Coimbatore, India on the various coconut processing machinery and equipments manufactured by them.

Session 5 : Strategies for Ensuring Sustainable Demand for Coconut as Functional Foods, Nutraceutical, Pharmaceutical, Cosmeceutical and Environmental Friendly Products

Coconut is no longer an oil crop since its multifaceted uses are being put into various applications, mainly in health, beauty care, nutrition, environment friendliness etc. The session was very relevant under these circumstances and the stakeholders got an idea about the market outlook through the presentations in this session. The first topic “Outlook of Coconut Products Market Demand” was presented by Mr. Tomas B. Medina, President & CEO, Brand Exports, Philippines who gave an outlook on the coconut products in the global market, major players, major markets and importing countries and the predicted CAGR for the various coconut products. The talk on “Coconut Flour as a Functional Food/Ingredient: Future Perspectives” was presented by Dr. Domina Esther Mbela Nkuba, Senior Research Officer, Tanzania Food and Nutrition Centre (TFNC), Tanzania. She presented in detail on the nutritional composition of coconut flour, method of preparation, health benefits, and future perspectives of functional coconut flour. “Challenges and Prospects in the sector of Coconut Shell Charcoal Activated Carbon and Coconut Shell Charcoal” was presented by one of the pioneers in the global activated carbon sector globally, Mr. Yves Debayles, President Asia, Jacobi Carbon, Singapore. He reiterated the fact that activated carbon has emerged as an essential industry with applications from drinking water treatment and gold mining to super capacitors. The prospects for activated carbon is very promising not only from the water purification market but also increased demand from crisis proof industries like pharma, food, personal protection, gold mining etc. Dr. Anita Das Ravindranath, Former Director, Central Coir Research



Institute (Coir Board), Ministry of Micro Small and Medium Enterprises, India presented on the topic – “Processing of Coir and Coir Based Products and its Market Potential - Indian Scenario”. She explained the increasing demand for natural fibres and its varied uses in textiles, agrotech, buildtech, clothtech by blending with other fibres, geotech, packtech, hometech, garden articles etc. The advantages of coir wood and uses of coir composites was explained and the Ecomark certification system was detailed.

Session 6 : Smart Farming and Adaptation Strategies to Climate Change for Sustaining Coconut Production and Increasing Farm Productivity

Mrs. Supattra Lertwattanakiat, Senior Fruit Expert, Horticultural Research Institute, Thailand presented on the “Smart Farming Practices for Sustainable Coconut Development in Thailand”. She explained the 20 year National Strategy for coconut and the BCG model followed – Bioeconomy, Circular Economy and Green economy. She also briefed about the coconut situation in Thailand, developmental activities and research undertaken etc. The talk on “Efficient Coconut Farming System for Increasing Coconut Production” was presented by Mr. Mohd Ibrahim Basri, Assistant Director, Department of Agriculture Malaysia. He presented an overview of the Malaysian Coconut Industry and its strategic plan and development. Smart Irrigation system with IOT was explained which is a combination of monitoring and control and the piloting in different places was presented. Dr. Hengky Novrianto, Senior Scientist, Indonesian Palm Crops Research Institute, Manado, Indonesia presented on “Increasing Coconut and Farm Productivity”. He explained the different strategies to increase production and productivity and at the same time increase farm income too. He explained about the special types like Kopyor dwarf coconut, Pandan Wangi dwarf coconut and the different hybrid coconuts released. The paper on “Mitigating the Impacts of Climate Change on Coconut Plantations through the Use of Mucuna Cover Crop” was presented by Dr. Rohit Lal, Senior Research Officer, Ministry of Agriculture, Fiji.

He stressed on the need to undertake resilience measures to climate change and the use of Mucuna as cover crop in conserving moisture and maintaining soil health. This was followed by a presentation by Goma Engineering PVT LTD., Mumbai, India where they presented the machinery and equipment available with them for coconut processing.

Session 7 : Innovative Strategies for Preventing Economic Losses Caused by Pests and Diseases

Pest and disease management is very crucial in ensuring production and productivity. Mechanisms of management should be technology driven to increase efficiency. The first paper, “Innovative Science & Technology to Deliver Solutions to the ICC’s Greatest Challenge – Where Are We at Now?” was delivered by Dr. Wee Tek Tay, Senior Research Scientist, Commonwealth Scientific and Industrial Research Organization (CSIRO), Australia. He explained the need for biosecurity preparedness to reduce spread of pests. This was followed by a paper by Dr. Wayne A. Myrie, Plant Pathologist, Coconut Industry Board, Jamaica on “Homogeneity of the 16S rRNA Genes in the Coconut Lethal Yellowing Phytoplasma in Jamaica”. He presented on coconut

sector in Jamaica and the impact of the disease, Lethal Yellowing which is a Phytoplasma disease. He explained the DNA sequencing done and the details of the 16S rRNA studied. Dr. Meldy L. A. Hosang, Head, Crop Protection Division, IPCRI, Manado, Indonesia presented on the “Technologies for Management of Rhynchoporus ferruginous in Indonesia”. He presented details on its occurrence, ecology, damage and control mechanisms adopted. This was followed by a presentation on “The Strategies of Controlling Weligama Coconut Leaf Wilt Disease and its Current Status in Sri Lanka” by Dr. Rohana Wijesekera, Former Head, Crop Protection Division, CRI, Sri Lanka. He presented the history of incidence, demarcation of area undertaken, management strategies adopted and the current status of the disease.

The celebration of World Coconut Day was also done along with COCOTECH on the last day and the prize winners of the various competitions were announced. The Conference ended with the preparation and adoption of Recommendations from 49th International COCOTECH Conference. It was a good virtual gathering of people who love coconut. ■

Vanijya Utsav

Coconut Development Board, Regional office, Guwahati participated in the Vanijya Utsav (Azadi ka Amrit Mahotsav) organized by the Tea Board, in association with Directorate General of Foreign Trade and Govt of Assam held from 21st to 22nd September 2021 at Sri Sri Madhabdeva International Auditorium, Panjabari, Guwahati. Coconut Development Board displayed various varieties of coconut convenience foods, value added products from coconut kernel, coconut shell & coconut water, coconut shell/wood based handicrafts and various leaflets, books & publications on coconut and postures on the nutritional and health benefit on coconut and its products in the Stall. Two

coconut based entrepreneurs displayed their products and services in the Board’s stall. Spices Board, Tea Board, Coffee Board, Rubber Board, DC Handicraft Govt of India, Indian Chamber of Commerce, SBI etc also participated in the exhibition and displayed their products in their stall. The theme of Vanijya Utsav was “Showcasing India as a Rising Economic Force and exploring the Export Potential of Assam”. Shri Chandra Mohan Patwary, Hon’ble Minister of Industries, Commerce & Enterprise Govt. of Assam, the Chief Guest inaugurated the programme and Shri Kamakhya Prasad Tasa, Hon’ble Member of Rajya Sabha was present as guest of honour. The Minister and MP visited CDB’s stall

