



Challenges & Opportunities on the Ground for the Implementation of Pesticide Risk Reduction Practices

Regional Consultation meeting of CABI's Asia-PACIFIC

Putrajaya, 18-20 February 2025

The International Coconut Community (ICC)

an intergovernmental organization of coconut producing countries organized in 1969 under the aegis of the United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP)

Vision

Globally Sustainable, Resilient, Inclusive and Highly Profitable Coconut Sector









Vision

ICC Vision is Globally Sustainable, Resilient, Inclusive and highly Profitable Coconut Sector.



Mission

ICC Mission is the development of the Coconut Sector through its member countries to:



Global Perspective

The revised vision takes a broader view, acknowledging that the coconut sector has a global reach and impact. This reflects the interconnectedness of markets and the potential for export and international trade.



Sustainability

Farming practices, conservation of coconut genetic resources & other natural resources, reduction of the sector's ecological footprint, farmer's livelihood



Resilience

to adapt and withstand various challenges: climate change, pests, diseases, unprecedented pandemic, & geopolitical instability.



Inclusivity

including all stakeholders, from smallholder farmers to larger corporations. This can lead to more equitable distribution of resources and opportunities.



Profitability

Attracting investment and ensuring the sustainability of the coconut sector



Accelerate transition to sustainable conservation & utilization, production & consumption



Increase production through eco-friendly, climate smart agriculture and precision farming



Promote product diversification, good quality of products and the development of innovative products to sustain market

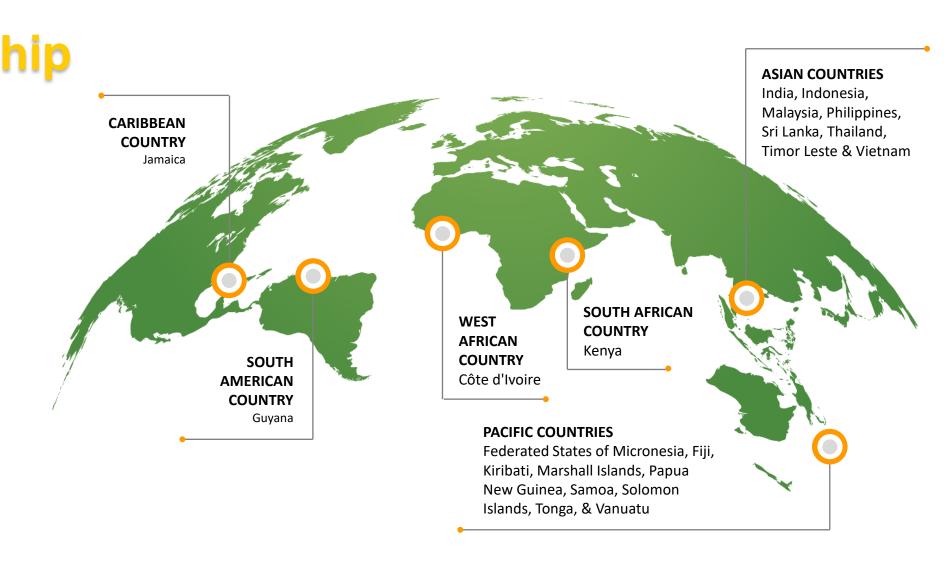


Establish sustainable, resilient, and highly competitive Farmer groups/cooperatives, MSMEs & Industries

JABI

KNOW LLDGE FOR LIFE

ICC currently has 21 coconut producing member countries accounting for over 90 percent of world coconut production and exports of coconut products



Membership to the Community is open to all coconut producing countries, with the unanimous conser of the existing members and by acceding to the agreement establishing the Coconut Community ABI



Coconut Genetic Resources Networks (COGENT)

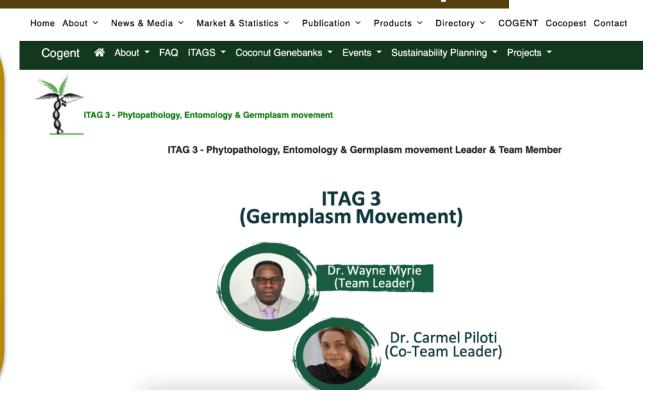
ITAGs (International Thematic Action Groups

Ex-situ & In-Situ Conservation

Coconut Genomics & Breeding

Crop Protection and Movement of germplasm

In-Vitro Culture Conservation & Cryopreservation



COGENT has been established since 1991, organized by IPGRI-BI. COGENT has been officially transferred to



International Coconut Gene Banks (ICGs)

FAO/ITPGRFA - ICC/COGENT Host Countries

(Brazil, Cote d'Ivoire, India, Indonesia, PNG)

ICG-LAC
Latin America &
Caribbean

Brazil
Colombia
Costa Rica

Cuba, Guyana

Haiti, Honduras

Jamaica, Mexico

Trinidad & Tobago

ICG-AIO
Africa & Indian
Ocean

Cote d'Ivoire
Ghana, Kenya
Madagascar,
Mozambique
Nigeria
Seychelles
Tanzania

ICG-SAME
South Asia &
Middle East

India
Bangladesh
Pakistan
Sri Lanka
Sultanate

ICG-SEA
Southeast & East
Asia

Indonesia
Indonesia
Malaysia
Myanmar
Philippines
Thailand
Vietnam

ICG-SP
South Pacific

Papua New Guinea
Cook Islands
Fiji, Kiribati
Samoa
Solomon Islands,
Tonga
Vanuatu

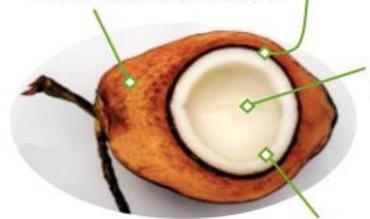


The tree of Life



Coconut Husk (Mesocarp)

- coco pith, coco fiber
- Biodegradable pots, geotextile
- Complex furniture
- Floor mats, wall & door panels
- Rope, strings, brushes
- Fishing nets
- Automotive dashboards
- fuel, buff floors, mosquito repellant



Coconut Shell (Endocarp)

- · Charcoal:
- Activated Carbon
- Charcoal Briguettes:
- Barbeque, shisha/Hookah alternative bioenergy
- Mosquito repellent
- Handicrafts
- Speaker

Coconut Trunk



- Durable Furniture
- Houses
- Drums
- Containers
 - Canoes

Coconut Water

- Refreshing drink
- Nata de coco
- Soy sauce
- Vinegar
- Cider

Coconut Root



- Dye
- Mouthwash

Coconut Inflorescence



- Sugar
- wine.
- candy,
- syrup
- Fresh neera

Coconut Meat (Kernel)

- Coconut oil: oleochemical
- Virgin coconut oil (VCO)
- Coconut milk, cream, yogurt
- White & Edible copra
- Coconut flour
- Desiccated Coconut (DC)
- Biscuit Biofuel
- Cosmetics
- Pharmaceuticals

Coconut Leaves



- Book cover
- Broom
- Baskets + mats
- Cooking skewers
- Kindling
- Roofing
- straws

Global Significance of Coconut Industry

Global Spatial Distribution of Coconut Area, 2023



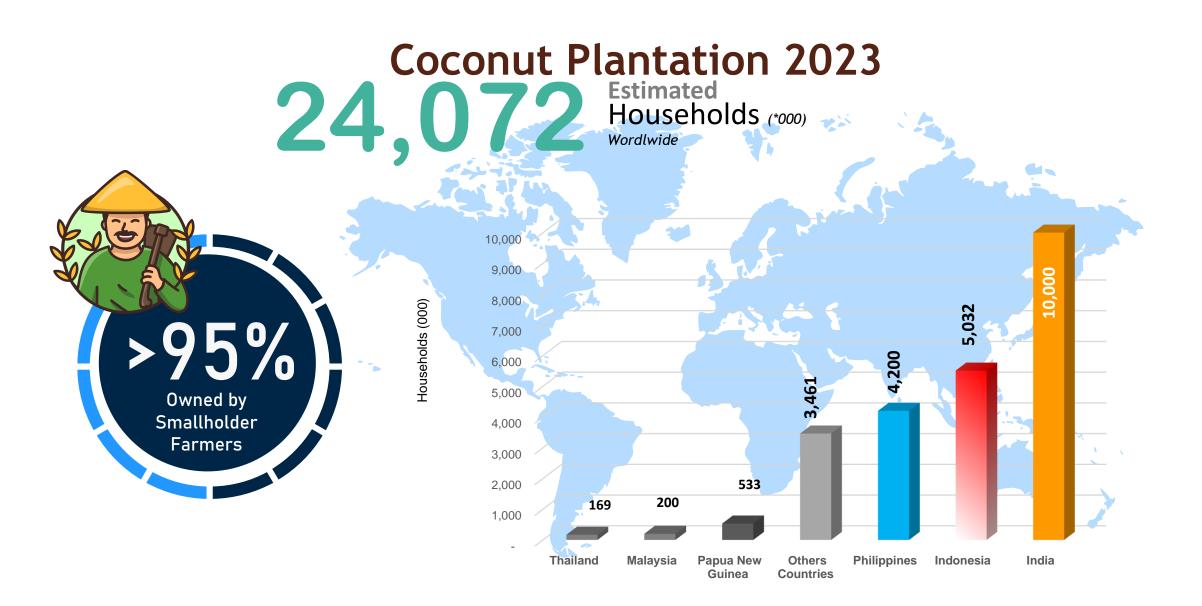


Papua New Guinea 229.00

Philippines 3,634.38

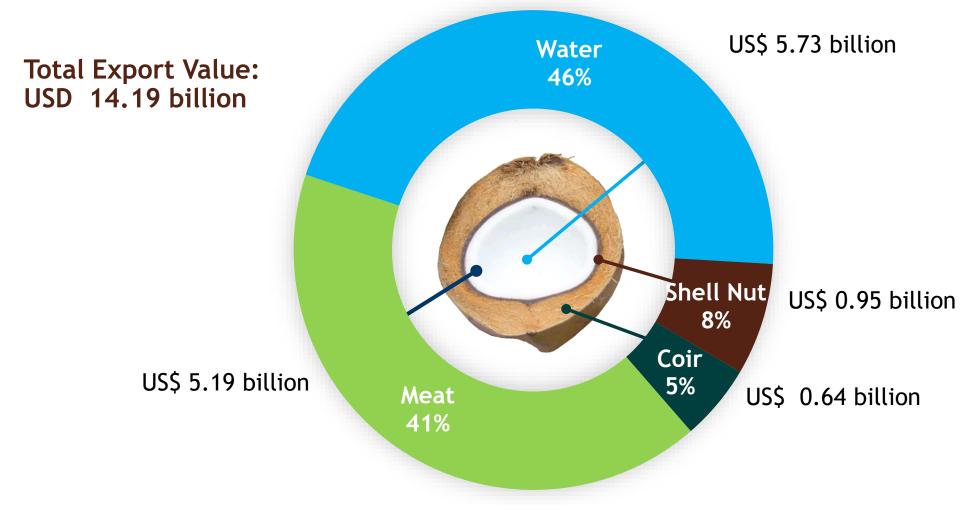
F.S. Micronesia 18.30

61.11





Global Significance of Coconut Industry





Potential Contribution of Coconut Industry Globally



Production 2023

67.052 Bill. Nuts 11,845,367 (MT Copra Eq.) Coconut Oil:

13.14 Bill. USD

Coconut Water:

18.42 Bill. USD

Coconut Shell Charcoal:

1.09 Bill. USD

Coconut Shisha briquette:

5.05 Bill. USD

Copra Meal:

940.24 Mill. USD

Coconut Fiber & Peat:

1.89 Bill. USD

14.19 Bill. USD (2023)



41.3 Bill.

Est, Total Global Export Value USD (\$)



Potential Export

Coconut Oil from non-standard Coconut as Feedstock for Sustainable Aviation Fuel (SAF)

- Hydrocarbon of coconut oil is suitable for making SAF (kerosene)
- Coconut oil (CNO) & Palm Kernel Oil (PKO) contain high percentage of C6-C16, that are suitable for making SAF

															-
Oil Types	Hydrocarbon (carbon-chain)														
	C8	C	10	C12	C12 C14		C16		C18	C18:1	C18:2	C18:3	C20	C22	
Coconut	8		7	48		17	9			7	2	1			
Palm Kernel	4		5	50		15	7		1	15	2				T
Palm						2	42		5	41	10				
Tallow						4	30		19	40	5	1]
Soya							8		4	28	53	6]
Rapeseed (low)							4			54	28	8	2	3	3
Sunflower							6		4	28	61		1		1

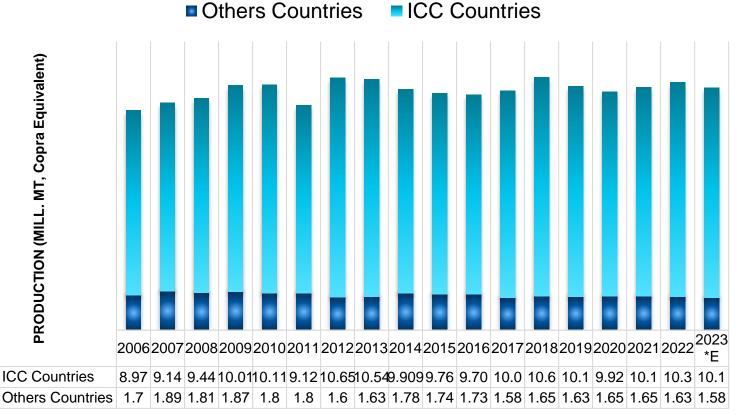


Coconut oil & PKO C6–C16: Kerosene (jet fuel)

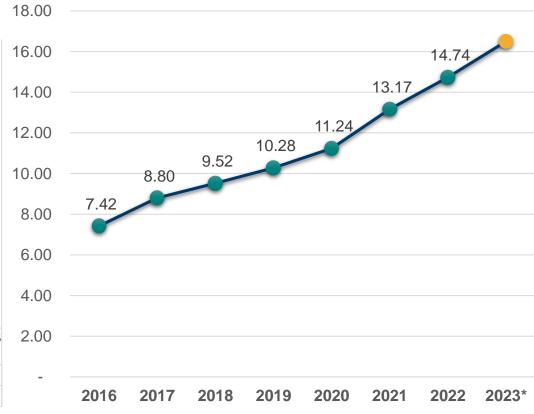
ICAO Releases Revised
Positive List adding NonStandard Coconuts for
Sustainable Aviation
Fuel (SAF)

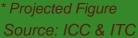
April 2024

Global Production: on a plateau !!!



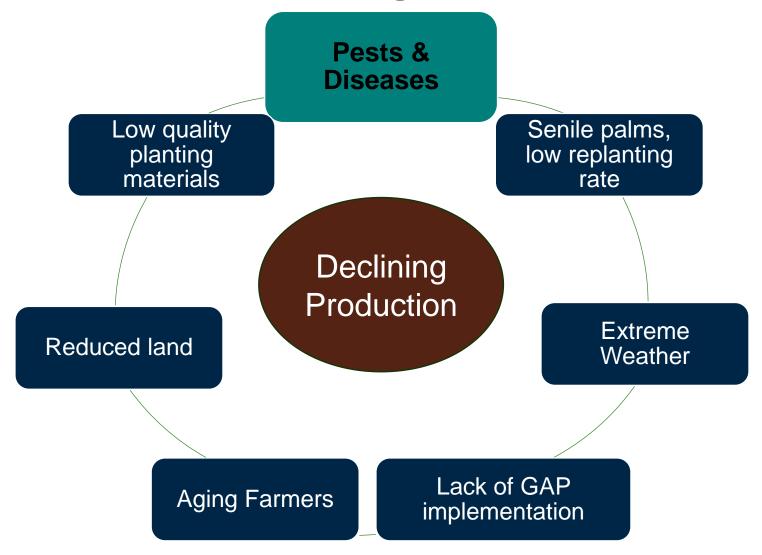
Global Export Trend (million MT)







Why is Coconut Production Declining?



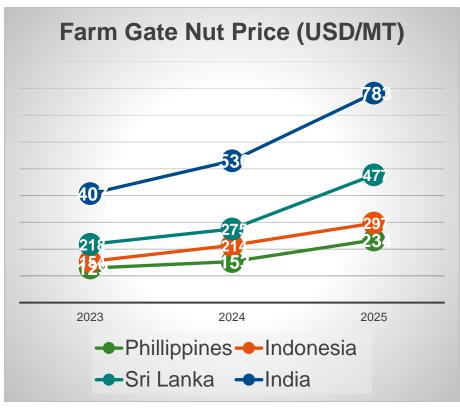


Impacts of a Shortage of Raw Materials in Coconut Industry



KILASRIAU.com – Kebijakan pemutusan hubungan kerja (PHK) massal yang dilakukan oleh PT Pulau Sambu Grup dan PT RSUP di Kecamatan Pulau Burung dan Kecamatan Kateman, Kabupaten Indragiri Hilir, menuai sorotan tajam dari berbagai pihak. Sebanyak 1.700 pekerja dari PT Pulau Sambu Grup dan 1.800 pekerja dari PT RSUP terpaksa kehilangan mata pencaharian akibat kelangkaan bahan baku kelapa.

Thousands of workers have been laid off in Sambu group coconut industry due to a shortage of raw materials caused by low production



Source: ICC: UCAP, CDA,

Raw material price trend in major coconut

producing countries













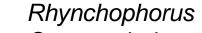












Cyrtotrachelus

• Oryctes

• Brontispa

Promecotheca

Plesispa

Artona

Opisina

Limacodidae

Sexava

Segestes

Amblypelta

Aspidiotus

Budrot, LYD, BCS,



1st International Symposium on IPM in Coconut

ICC in collaboration with the Philippines Coconut Authority (PCA) organized a four-day virtual International IPM Symposium on Coconut, **23-26 August 2022**.

The theme: "Implementing IPM to Sustainably Protect Coconut, Producers and Industry".



IOP Conference Series

Earth and Environmental Science



1st International Integrated Pest and Management Symposium on Coconut

IOP Conference series provides global visibility, open access, & long-term accessibility, enhancing

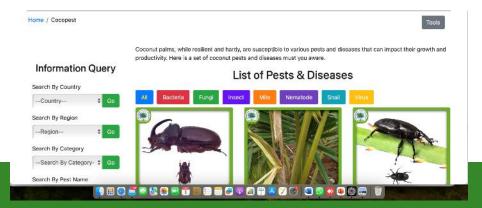
ICC-CABI Collaboration: cocopest webpage







https://cocopest.coconutcommunity.org/webpage/data/2





Knowledge Sharing on Pest management at The 50th International COCOTECH Conference & Exhibition











Speakers: 39

Exhibitors: 40 from 7 countries

Conference Participants &

Exhibition visitors: 937 from 52



Coconut & Bio-products exhibited at the 50th International COCOTECH Conference & Exhibition in KL



















Pest Management 50th International COCOTECH Conference & Exhibition The Field Trip

























Workshop on Good Agriculture Practices (GAP)



Tissue Culture Symposium: disease-resistant variety development





Tissue Culture Workshop













Technical Working Group and Quality Standards Meeting











Collaboration with NAM-CSSTC, Embassy of Indonesia in Timor Leste







Capacity Building for Coconut Replanting Program, propagation and use of biocontrol products



Research Collaboration on CRB-G with CSIRO

(Commonwealth Scientific & Industrial Research Organization)















Article

Alternative DNA Markers to Detect Guam-Specific CRB-G (Clade I) Oryctes rhinoceros (Coleoptera: Scarabaeidae) Indicate That the Beetle Did Not Disperse from Guam to the Solomon Islands or Palau

Wee Tek Tay ^{1,*}[0], Sean D. G. Marshall ²[0], Angel David Popa-Baez ¹[0], Glenn F. J. Dulla ³, Andrea L. Blas ⁴, Juniaty W. Sambiran ⁵, Meldy Hosang ⁶, Justine Bennette H. Millado ⁷, Michael Melzer ⁸, Rahul V. Rane ⁹, Tim Hogarty ¹⁰, Demi Yi-Chun Cho ¹[0], Jelfina C. Alouw ^{6,11}[0], Muhammad Faheem ¹²[0] and Benjamin D. Hoffmann ¹³[0]



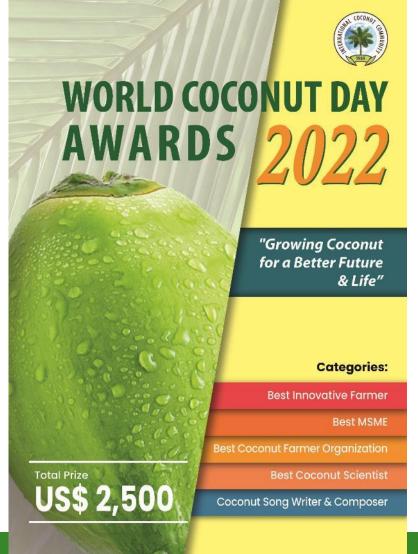




multigene approaches can provide more comprehensive evidence than single-gene analyses

Use of either the mtCOI or mtCOIII genes is recommended as an initial approach to first confirm that samples are O. rhinoceros

World Coconut Day Awards 2022











IPM in Coconut (PNS/BAFS 238:2018 ICS 65.020)

STANDARD

PHILIPPINE NATIONAL

PNS/BAFS 238:2018 ICS 65.020

Code of Good Agricultural Practices (GAP) for coconut

BUREAU OF AGRICULTURE AND FISHERIES STANDARDS
BPI Compound Visayas Avenue, Dillman, Quezon City 1101 Philippines
Trunkline (632) 928-8741 to 64 loc. 3301-3319
E-mail: info.dabafs@gmail.com

PHILIPPINE NATIONAL STANDARD

PNS/BAFS 238:2018

Code of Good Agricultural Practices (GAP) for coconut

ICS 65.020

Annex E (informative)

Integrated Pest Management strategies

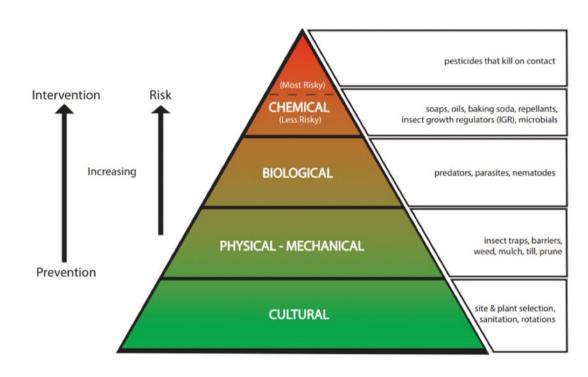


Figure E.1 - Pyramid of IPM tactics



ICC's Program to Address Low Coconut Production due to Pests & Diseases

- 1. International Certificate Course for Coconut Development officers
- 2. The International Training Course for Youth in the Coconut Industry (2024-2025)
 Theme: Empowering the Future of Coconut Sector: A Youth-Led Transformation Program through Sustainable Partnerships
- 3. 4. COGENT- ITAGs (International thematic action group 3 for R&D (phytopathology, entomology, germplasm movement)







Youth Empowerment program

Theme: Empowering the Future of Coconut Sector: A Youth-Led Transformation Program through Sustainable Partnerships



- Tworkshops on coconut farming, sustainability, and market trends (virtual, 2024).
- T Skill development programs in processing and digital marketing
- 1 Internship opportunities in coconut industries or CRI
- **1** Entrepreneurship grants
- **T** Community development initiatives.







Ways Forward

Networks & Collaboration



















International
Trade
Centre





Australian Government

Australian Centre for International Agricultural Research









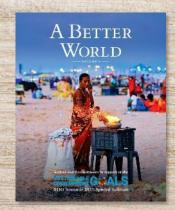
Australian Government

Department of Foreign Affairs and Trade





ICC PUBLICATIONS IN 2023



SDG Summit 2023 – A Better World



International COCOTECH Conference – IOP Conference Series



International IPM
Symposium on
Coconut – IOP
Conference Series



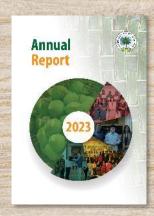
Proceedings of the International Seminar on Harnessing Carbon Potential for Offsetting Carbon



Quarterly Bulletin (4)



Report and Proceedings of the 59th ICC Session & Ministerial Meeting



Annual Report 2023



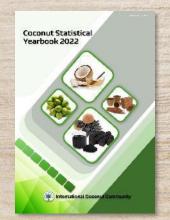
Coconut Research & Development



Cocoinfo International (2)



The Cocommunity (12)



Coconut Statistical Yearbook



COGENT Newsletter 2023



Reduce the risk of pesticide use through collaborative efforts



to achieve sustainable and resilient coconut sector







Vinaka cảm ơn bạn

धन्यवाद

Terima kasih Gratias tibi Asante

Ko rab'a

Kommool

Kalahngan

Tenk yu

Salamat

Fa'afetai

Tanggio

நன்றி ขอบคุณ Obrigadu

Mālō 'aupito

Tangkyu

Thank you