



FOSTERING COCONUT SUSTAINABILITY THROUGH PARTNERSHIP

Fifth Sustainable Coconut Roundtable

29 SEPTEMBER, 2021



SUSTAINABLE Coconut &
Coconut Oil Roundtable





Christy Owen

Chief of Party | USAID Green Invest Asia

Christy serves as the Chief of Party for USAID Green Invest Asia, and Thailand Country Director for the global NGO, Pact, Inc. She oversees a team mobilizing private investment into low-emission agriculture and forestry practices across Southeast Asia.

She has spent nearly 20 years designing and implementing environmental management, biodiversity conservation, and climate change projects in the Philippines, Venezuela, El Salvador, Equatorial Guinea, and the lower Mekong region.





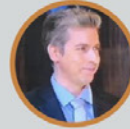
Antitrust statement

"The association shall not enter into any discussion, activity or conduct that may infringe, on its part or on the part of its members, any applicable competition law. By way of example, members shall not discuss, communicate or exchange, any commercially sensitive information, including information relating to prices, marketing and advertising strategy, costs and revenues, trading terms and conditions with third parties, including purchasing strategy, terms of supply, trade programs, or distribution strategy."



AGENDA

| | |
|-------|---|
| 16.00 | Welcome |
| 16.05 | Opening remarks |
| 16.10 | Formalizing a Platform for the Coconut Sector |
| 16.30 | Q&A |
| 16.40 | Panel Discussion: Driving Sustainable Sourcing through Climate Smart Landscape |
| 17.00 | Q&A |
| 17.10 | Innovative application of remote sensing for determining GHG emissions and deforestation risk of coconut plantation |
| 17.30 | Q&A |
| 17.40 | Key takeaways and closing remarks |



Aaron Brownell
Director Regional Environment Office
USAID Regional Development Mission
for Asia



Massimo Selmo
Global Head of Sourcing
Barry Callebaut



Christy Owen
Chief of Party
USAID Green Invest Asia
(Moderator)



Cornelia Skokov
Chief Advisor, Coordinator of Development
Partnerships in Agriculture with the Private
Sector
GIZ



Oliver von Hagen
Sustainability Director – Global Ingredients,
Barry Callebaut



Madeleine Eilert
Global Sustainable Sourcing Leader Sugar and Coconut
Nestlé



Karis Tenneson
Director of the Environmental Mapping Domain
Spatial Informatics Group

WEDNESDAY
29th

SEPTEMBER, 2021
16:00-17:55 ICT
BANGKOK





SUSTAINABLE Coconut &
Coconut Oil Roundtable

WELCOME SPEECH





Aaron Brownell

Director Regional Environment Office | USAID Regional Development Mission for Asia

Aaron Brownell joined the USAID in January of 2005 and has served in Washington DC, Madagascar, Senegal, the Regional Development Mission for Asia (RDMA), Southern Africa Regional and Vietnam. He returns to RDMA as the Director for the Regional Environment Office and was formerly an Economic Growth Office Director; a Natural Resources Management Team Leader; a Senior Regional Environmental Advisor and a Program Officer.

Before working with USAID, he worked with other organizations such as Conservation International, Peace Corps, GTZ, and the Houston Zoo.



OPENING REMARKS





Massimo Selmo

Global Head of Sourcing | Barry Callebaut

Massimo Selmo (1965) started to work for Barry Callebaut Italia as CFO in 1996 (Milan offices). In 1999 he moved to Switzerland to lead the centralization of Sourcing as Head of Global Sourcing. As of 2016 he is a member of the Board of Directors of Masschallenge, a global start-up accelerator sponsored by Barry Callebaut. Massimo Selmo graduated in 1992 at the “Università Commerciale Luigi Bocconi” in Milan and holds a Master’s degree in Business Administration.





SUSTAINABLE Coconut &
Coconut Oil Roundtable

FORMALIZING A PLATFORM

FOR THE COCONUT SECTOR



A Brief History of the Sustainable Coconut Roundtable

| | | |
|--|--|---|
| <p>First Roundtable in Kuala Lumpur Mar.</p> <p>Second Roundtable coconut conversation Nov.</p> <p>2019</p> | <p>Sustainable Coconut Charter launch: Forging a more sustainable coconut industry</p>  | <p>Call to formalize the sustainable coconut roundtable into an industry-led platform that that serves key players in the coconut supply chain.</p> <p>Jan. – Mar.</p> <p>2021</p> <p>Explore with signatories about next steps</p> <p>Apr.- present</p> |
|   | <p>Jun.</p> <p>Third Roundtable Webinar</p> <p>Nov.</p> <p>Fourth Roundtable Sustainable Coconut Charter Signing and establishment of www.sustainablecoconutcharter.com</p> |  <p>FOUNDING MEMBERS</p>  |

OVER THE COURSE OF IN THE LAST 2 YEARS

311
number of people have joined the meetings

1,944
number of visitors to sustainablecoconutcharter website

70
number of people who have expressed interest in signing/joining the coconut charter



What should the future look like?

**An independent organization-
“the platform”- which is able to
manage a set of activities and
grow without over-reliance on
any one organization.**

This platform will build from the Sustainable Coconut Roundtable and use the Sustainable Coconut Charter as the backbone for membership and strategic direction. It may have new workstreams related to research, impact programs, and investment which support the three pillars of the Sustainable Coconut Charter and a theory of change.



Lessons to be learned





Governance Structure Highlights

- ❖ Membership plan
- ❖ General Assembly
- ❖ Board of Directors Structure and Selection
- ❖ Decision Making
- ❖ Fund Raising and Budgeting
- ❖ Legal Structure

Specific Terms

General Assembly :

the main body of “the platform”. It is made up of all members of “the platform”. The General Assembly represents all members of the “platform”.

Board of Directors :

the main body that provides strategic direction, budgeting and work themes of “the platform”.

Initial feedback from Signatory Members

- a. facilitate a transparent, participatory process to ensure legitimacy of platform
- b. the formalized platform should be impact-focused, with the ability to support farm-level actions/activities
- c. there is a need for clear theory of change to define purpose and objectives of the formalized structure
- d. the member criteria should be expanded to cover all relevant stakeholders in coconut sector
- e. members of the formalized structure should sign the coconut charter as means to demonstrate commitment and alignment
- f. the ideal would be a nimble, flexible organization that is representative and benefits the coconut industry as a whole rather than a select few





Potential Activities/Benefits provided or supported

Knowledge and Advocacy / Raising Awareness

| Activity | Benefits |
|--|--|
| ❖ Regular roundtable events for building knowledge and awareness | Share experiences and best practices around members' sustainable journey; foster knowledge (Case Studies, Panel Discussions etc.); network; engagement with external stakeholders. |
| ❖ Working groups | To allow to find solutions to the industry's structural challenges. |
| ❖ Research activities on sustainable coconut | To allow objective and facts-based evidence to support knowledge and decision making of members. |

Achieving Recognition and Assurance for Sustainable Supply Chains

| Activity | Benefits |
|--|--|
| ❖ Developing assurance claims based on the sustainable coconut charter | To allow members to develop fit-for-purpose claims for their impact programs |
| ❖ Developing an M&E Tool based on the sustainable coconut charter | To be able to verify sustainability program's progress against the sustainable coconut charter |

Potential Activities/Benefits provided or supported

Impact / Transforming Coconut Supply Chains

| Activity | Benefits |
|---|--|
| ❖ Support development of impact programs | To connect members to project opportunities |
| ❖ Design & implement robust landscape interventions | To pilot new approaches going beyond farm level programmes only |
| ❖ Support development of sourcing projects | To connect members to sourcing project opportunities |
| ❖ Identify & involve local, capable stakeholders | To allow programs to be run in partnership with organizations who have a local knowledge and expertise |

Advisory and Support to Members

| Activity | Benefits |
|---|---|
| ❖ Conduct assessments, verifications, advisory services | To help provide members with advisory, training and capacity development services related to impact programs in coconut supply chains |
| ❖ Develop market intelligence | To help members on understanding market dynamics in relation to their impact with the sustainability of supply chains. |

Current Roles of Organizations Involved to Date

Signatory Members-

provide leadership as major buyers of coconut and coconut oil



Barry Callebaut-

initiated creation of the Sustainable Coconut Roundtable, supports agenda development of roundtables, convening for development of sustainable coconut charter



GIZ-

supporting coconut projects in the Philippines, with a landscape PPP forthcoming which can demonstrate impact principles of the Sustainable Coconut Charter as an on-the-ground activity, and provide support for future Sustainable Roundtables



USAID Green Invest Asia-

provide convening, organization and facilitation for Sustainable Coconut Roundtables, management of www.sustainablecoconutcharter.com serves as de facto secretariat until formalization of platform

USAID GREEN INVEST ASIA 

Task Force Objectives

Develop a governance structure and implementation roadmap for an impact-focused organization that creates value for all members and participants. The Task Force is expected to work collaboratively and with transparency. An experienced facilitator will support the Task Force to ensure that deliverables are met and that the Task Force works as efficiently as possible.

By the conclusion of the Task Force, it is anticipated that the following elements will be completed:

- a) A theory of change;
- b) A proposed governance structure, including, but not limited to areas such as membership, financial model, and decision-making;
- c) A roadmap for establishing a Board, legal registration, secretariat, financial requirements, inclusive membership, and activities supported through the platform (i.e. Roundtables, research, and/or impact activities); and
- d) Identification of any additional work or studies necessary to close any gaps pinpointed.



Task Force Member Criteria

Membership for the taskforce is open to all participants in the Sustainable Coconut Charter and Sustainable Coconut Roundtables. Members may apply or be nominated by their colleagues. It is expected that the total membership of the Task Force will not exceed seven (7).

Members of the Task Force will be expected to have the capacity and commitment for the following:

- ❖ Actively contribute to taskforce so that it can deliver on the goal and objectives;
- ❖ Provide constructive contributions to the Task Force Facilitator and other members for the drafting and finalization of governance structure, roadmap and proposal for the impact program following international best practice pre competitive platform; and
- ❖ Contribute toward communication with relevant stakeholders and USAID Green Invest Asia on the decisions taken by the Task Force.

Individuals interested or nominated for the Task Force will be evaluated against the following criteria:

- ❖ Strong knowledge and network in coconut industry
- ❖ Be in a mid-level management position or higher
- ❖ Be available and committed to actively participating in all Task Force meetings
(approximately 2 meetings per month over a 4 month period, respond timely to emails, representing approximately 12 days total level of effort)
- ❖ Have strong written and spoken competency in English
- ❖ Be an acknowledged representative of their respective organization
- ❖ Provide neutral and independent viewpoints and advice
- ❖ Preferably have one or more of the following areas of expertise:
 - Strong connections and/or networks with relevant coconut stakeholders
 - A legal and/or policy understanding/background
 - Market trends and opportunity of coconut industry

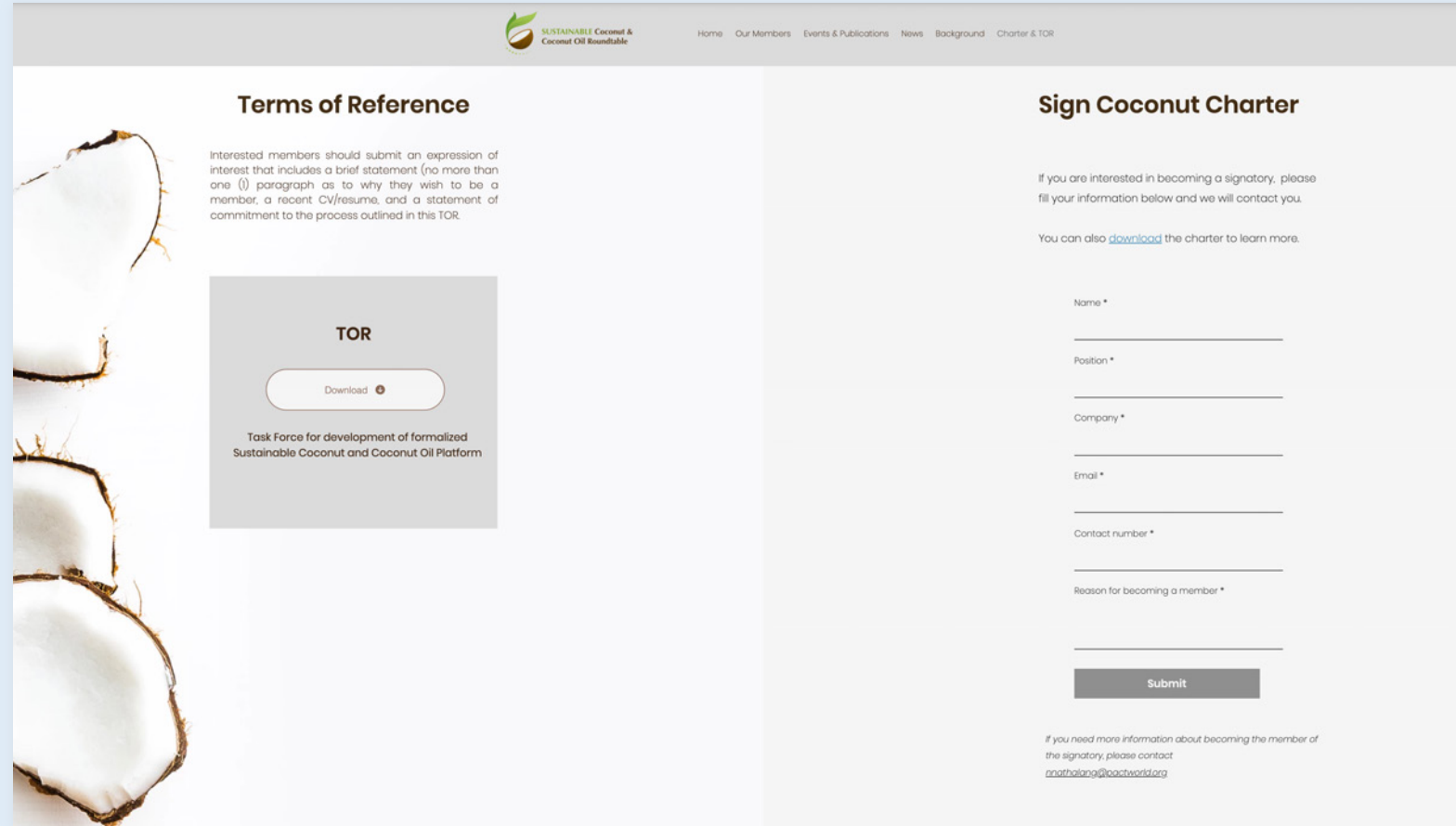
Task Force Member Nomination/Application

Interested members should submit an expression of interest that includes a brief statement (no more than one (1) paragraph as to why they wish to be a member, a recent CV/resume, and a statement of commitment to the process outlined in this TOR. Final composition of the Task Force will seek to balance major corporate representation, associations, and other supply chain actors.

This is a voluntary, non-paid role

Review the full terms of reference here:

www.sustainablecoconutcharter.com



The screenshot shows the website for the Sustainable Coconut & Coconut Oil Roundtable. The page is divided into two main sections: "Terms of Reference" and "Sign Coconut Charter".

Terms of Reference: This section includes a "TOR" download button and a description: "Interested members should submit an expression of interest that includes a brief statement (no more than one (1) paragraph as to why they wish to be a member, a recent CV/resume, and a statement of commitment to the process outlined in this TOR." Below the button, it states: "Task Force for development of formalized Sustainable Coconut and Coconut Oil Platform".

Sign Coconut Charter: This section contains a form for signing the charter. It includes a "Submit" button and a contact email: annathalang@coconutworld.org. The form fields are: Name *, Position *, Company *, Email *, Contact number *, and Reason for becoming a member *.



Proposed Next Steps

Creation of Task Force to develop a proposed structure, share purpose, scope, criteria for representatives

Identify experienced facilitator with expertise in managing multi-stakeholder process to work with the task force toward outputs

Establish regular check-in and feedback mechanism for tracking progress of Task Force



QUICK SURVEY





SUSTAINABLE Coconut &
Coconut Oil Roundtable

Q&A



PANEL DISCUSSION:

Driving Sustainable Sourcing through Climate Smart Landscape





Cornelia Skokov

Chief Advisor, Coordinator of Development Partnerships in Agriculture with the Private Sector | GIZ

Cornelia is chief advisor in the Strategic Alliance Sustainable Coconut (Oil) Production and Coordinator of Development Partnerships in Agriculture with the Private Sector in the Philippines. She manages a team implementing public-private-partnership projects for increased economic, ecologic and social sustainability, higher productivity and income for smallholder farmers of different commodities in the Philippines. Trained as an economist, she works with GIZ for over 15 years designing and implementing projects for private sector development in South-East-Europe, Caucasus, Central Asia and in the Philippines.





Sustainable Coconut Oil Production in the Philippines

Cooperation with the Private Sector in the Coconut Sector

September 2021



Implemented by



Portfolio of Development Partnership Projects with the private sector in the field of Agriculture



Implemented by



PRIVATE SECTOR



AgriDPP Projects



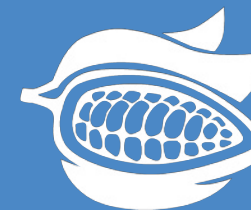
Rice



Abaca Fiber



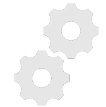
Coffee



Cacao



Coconut



Our Approach



Farmer Business
School Trainings



Good Agricultural
Practices



Sustainability
Certification



Demoplots
Establishment



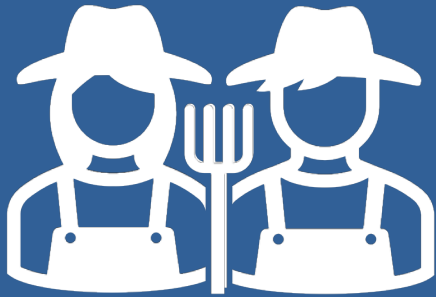
Stakeholder
Dialogue



Our Goal



Improved Productivity and
Sustainability



Smallholder Farmers



Increased
Yield



Increased
Income



STA COCO

The Strategic Alliance for Sustainable Coconut Oil Production in the Philippines

7 Private Partners




Helping the world thrive






Good food, Good life







7
Mio Euro



10.000
Smallholder Farmers

Palawan



South
Mindanao



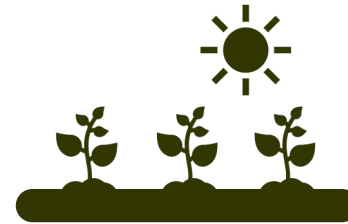
Project Approach



Farmer Business
School Trainings



Good Agricultural
Practices



Demoplots
Establishment



LANDSCALE

Increased Sustainability
through **LandScale**
Approach





Sector Transformation

Improved...



Transparency



Traceability



Sustainability

... of sourced
Coconut products



Multi-Stakeholder Platform



Coconut (Oil) Roundtable



Implemented by



PPP STA C_oco



Thank you for listening!





Madeleine Eilert

Global Sustainable Sourcing Leader Sugar and Coconut | Nestlé

Madeleine is the Sustainable Sourcing Leader for sugar and coconut at Nestlé where she oversees the responsible sourcing of these commodities. Madeleine started her career in Nestlé 20 years ago, working in operational logistics before moving into procurement roles in Germany and Switzerland. She joined the Responsible Sourcing team in 2013, focusing on responsible sourcing and traceability activities across Nestlé's global priority commodities. Since June 2020, she leads the responsible sourcing activities for sugar and coconut.





Oliver von Hagen

Sustainability Director – Global Ingredients | Barry Callebaut

Oliver von Hagen is Sustainability Director at the Barry Callebaut Group - the global market leader in cocoa and chocolate. In this role Oliver is responsible for developing and overseeing the sustainability strategy and its implementation for our raw materials at global level, covering more than 1 million metric tons of raw materials. Prior to joining Barry Callebaut in 2014 Oliver worked at the International Trade Centre (ITC) in Geneva and the United Nations Development Programme (UNDP) in Malawi.



PANEL DISCUSSION:

Driving Sustainable Sourcing through Climate Smart Landscape



Madeleine Eilert

Global Sustainable Sourcing Leader Sugar and Coconut | Nestlé



Oliver von Hagen

Sustainability Director – Global Ingredients | Barry Callebaut

Q&A





Karis Tenneson

Director of the Environmental Mapping Domain | Spatial Informatics Group

Dr. Karis Tenneson is the Director of the Environmental Mapping Domain at Spatial Informatics Group, with expertise in ecology, statistics, natural resources management, remote sensing and GIS. Her work focuses on co-developing decision support tools to monitor land use and land cover dynamics, forest biomass estimation using lidar and structure from motion, assessing ecosystem services, and scenario planning. Her most recent projects include managing cloud based remote sensing research and monitoring efforts with the Mekong and Amazonia SERVIR hubs. She has also developed various methods and knowledge transfer activities in support of SilvaCarbon capacity building initiatives aimed at more efficiently generating activity data for REDD+ and greenhouse gas inventories.

These efforts include the development of OpenForis applications; food security research; collaborative development of a customizable cloud-based land cover monitoring system; and delivering capacity building activities throughout Asia, central Africa, and the Amazon. Dr. Tenneson holds an Interdisciplinary PhD in Urban Design and Planning from the University of Washington, Seattle, with a specialization in spatial statistics and environmental planning. She has a master's degree in urban and regional planning and a BA in biology and mathematics.



INNOVATIVE APPLICATION OF REMOTE SENSING

for determining GHG emissions and deforestation risk of coconut plantation



Presentation Overview

- 1. Commodity-Driven Forest Loss: A Study of Southeast Asia (USAID RDMA)**
- 2. Modelling Nam Hom Coconut Suitability in Thailand (USAID Green Invest Asia)**



What is transferable from these RS projects?

- Identify opportunities for crop expansion and meeting productivity targets
- Certify zero deforestation operations (verify sourcing)
- Methods to estimate impacts on the carbon budget received from sustainable agriculture practices

A study commissioned by:



Commodity-Driven Forest Loss: A Study of Southeast Asia

Authors:

Karis Tenneson, Matthew S. Patterson, Jenna Jadin, Todd S. Rosenstock, Rachmat Mulia, Jiwon Kim, Nguyen Quyen, Ate Poortinga, Nguyen Mai Phuong, Seth Bogle, John Dilger, Sarah Marlay, Nguyen Quang Tan, Karen Dyson, Farrukh Chishtie and David Saah

Implemented in partnership by:



What happens after forest loss?

- What replaced previously forested lands?
- If agriculture, which crops?
- What are the carbon implications?



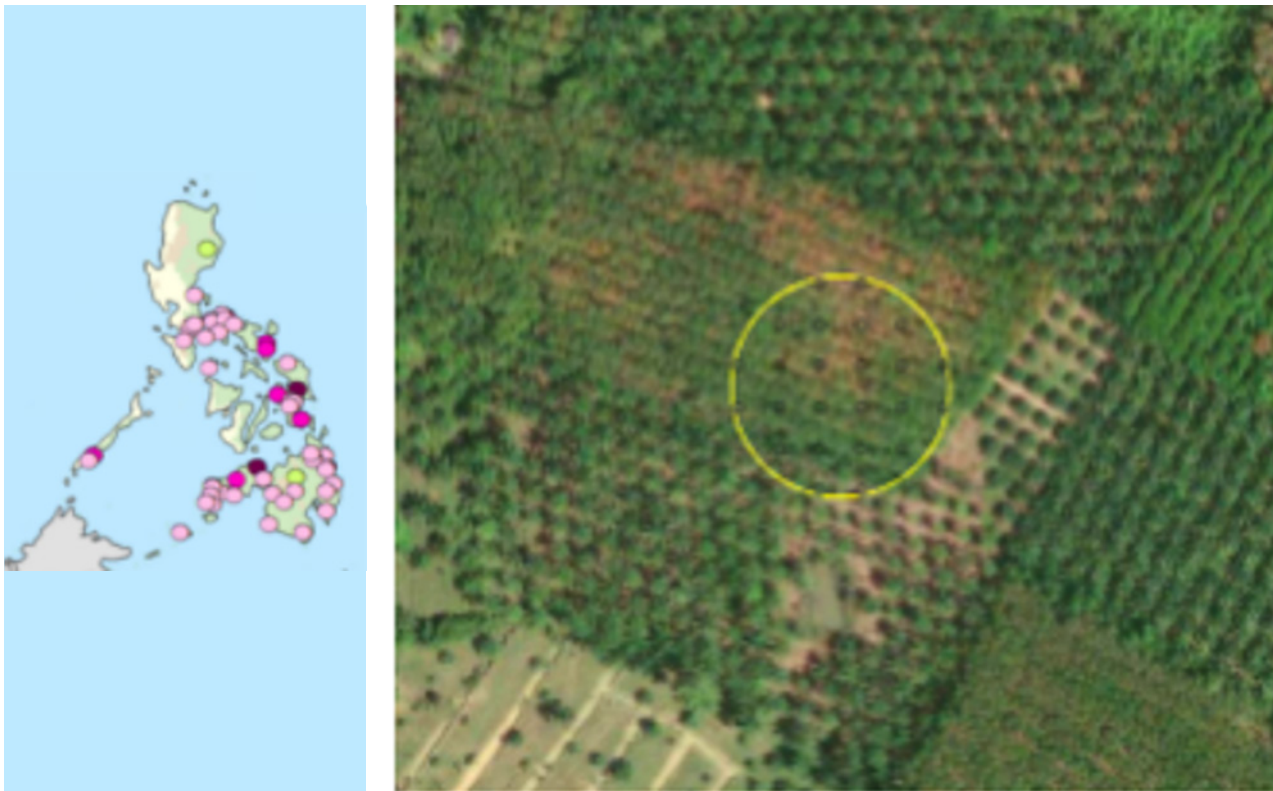
Assess Current Land Cover



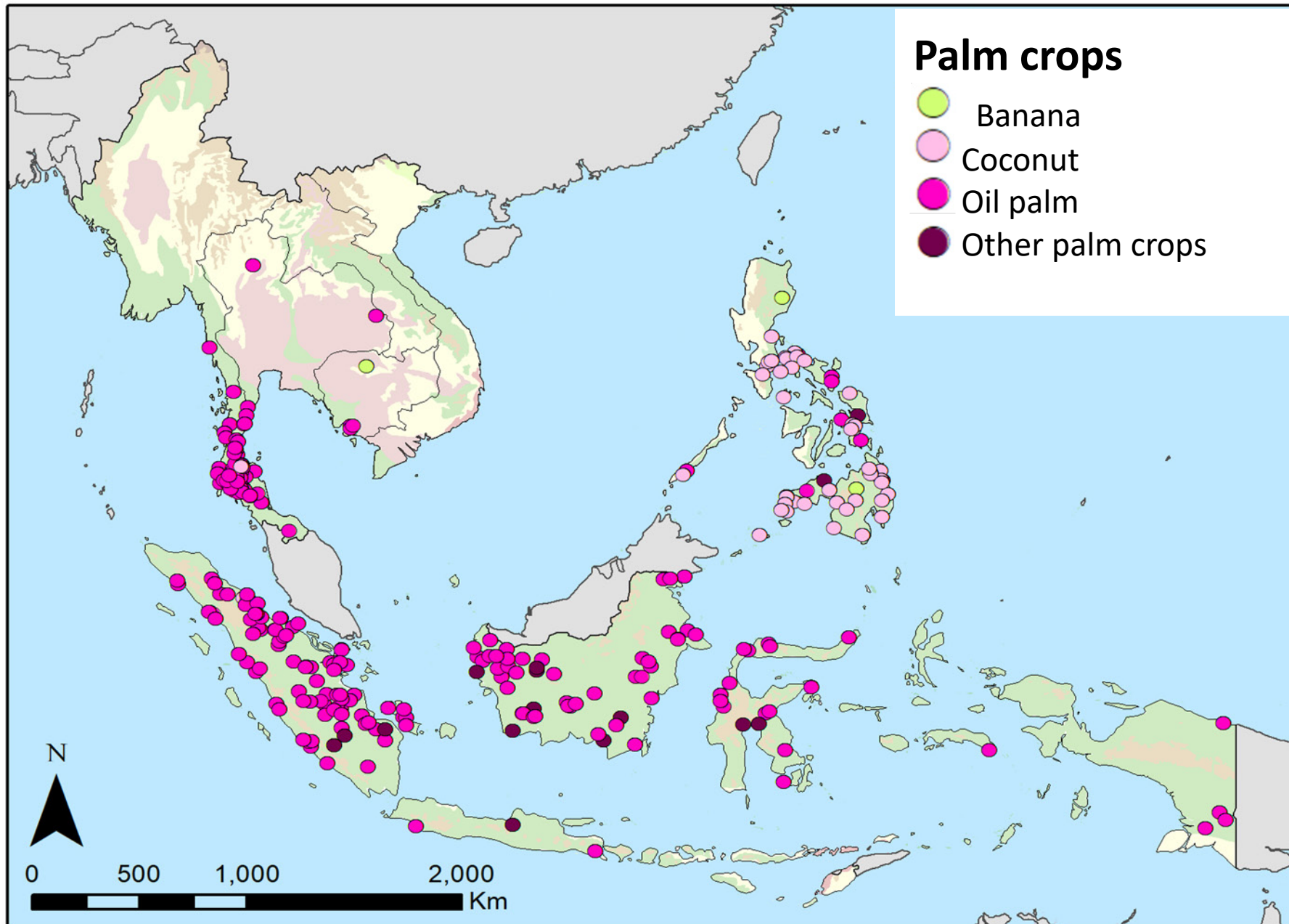
Survey Question I: Land Cover

| | |
|------------|---------------|
| Rubber | Other Shrub |
| Pulpwood | Bamboo |
| Fruit/Nut | Rice |
| Other Tree | Other Crop |
| Oil Palm | Herbaceous |
| Coconut | Non-vegetated |
| Banana | Aquaculture |
| Other Palm | Water |
| Coffee | Build-up |
| Tea | Other |

Schematic dashboard depicting what photo-interpreters used to evaluation land cover & change



Forest Cover Transitions to Palm Crops



Prevalence of Agricultural Systems in Previously Forested Lands

Herbaceous



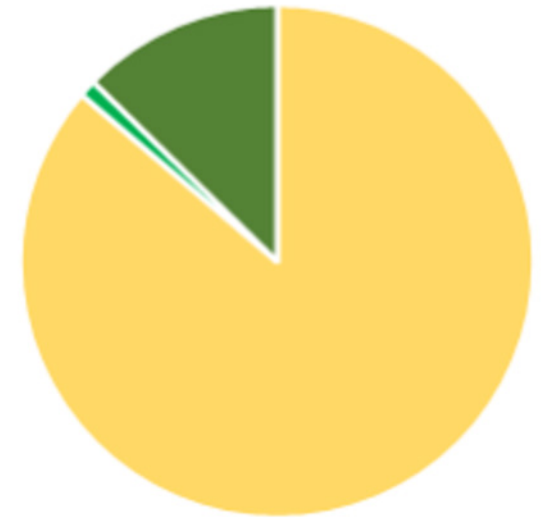
Shrub



Palm **



Tree **



Conventional



Agroforestry



Fence trees

** Understory plantings are often not visible in these crop types.

Modelling Nam Hom coconut suitability in Thailand

Peeranan Towashiraporn, David Saah,
Nishanta Khanal, Andrea Nicolau, & Karen Dyson



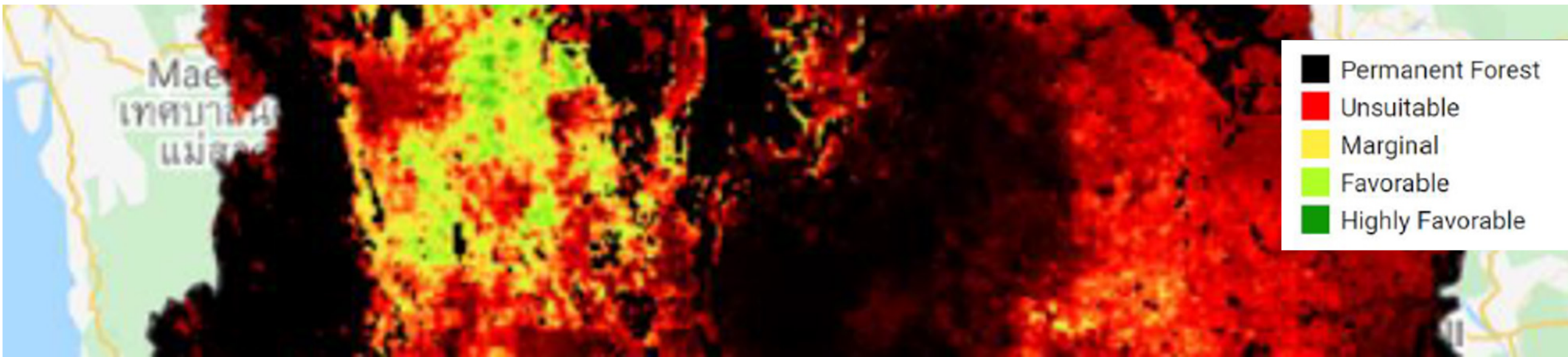
Botanical drawing of the much better
researched *Cocos nucifera* tall varietal --
Wikimedia

Overview

Regenerative organic coconut cultivation grows in just 4 Nam Hom coconut growing areas in Thailand

Goals

1. Identify potentially suitable lands to expand cultivation, focused on fallow land
2. Predict how yield could vary across landscape

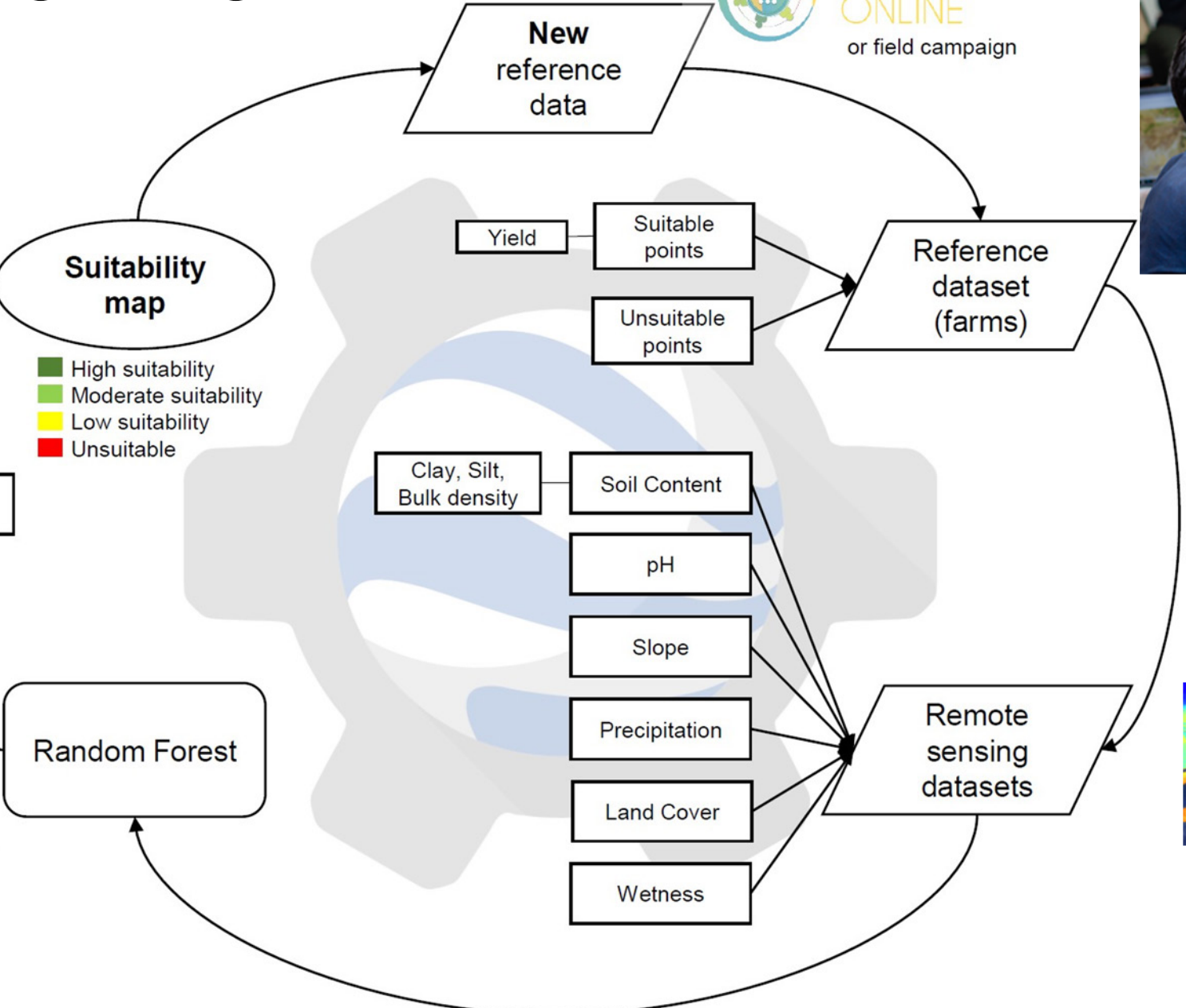
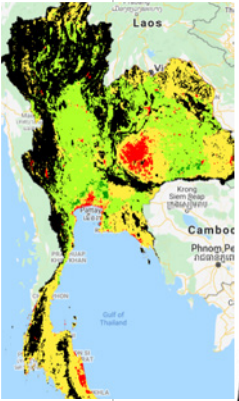


Map expected yields across Thailand

- Rain: time series information to represent linkage with production
 - Water stress appears 2 years after event, reduces fruit set
 - Too much rain impacts pollination and fruit set
- Soil composition and drainage important to maintain healthy roots
- Optimal weather: humidity is between 60-90% and average mean yearly temperature is 27-28 °C.



Analysis Workflow



Suitability map

- High suitability
- Moderate suitability
- Low suitability
- Unsuitable

Thresholds

Random Forest

New reference data

Reference dataset (farms)

Remote sensing datasets

Yield

Suitable points

Unsuitable points

Clay, Silt, Bulk density

Soil Content

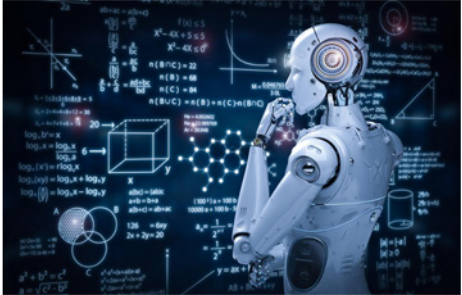
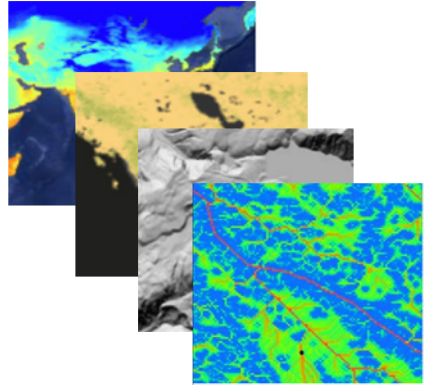
pH

Slope

Precipitation

Land Cover

Wetness



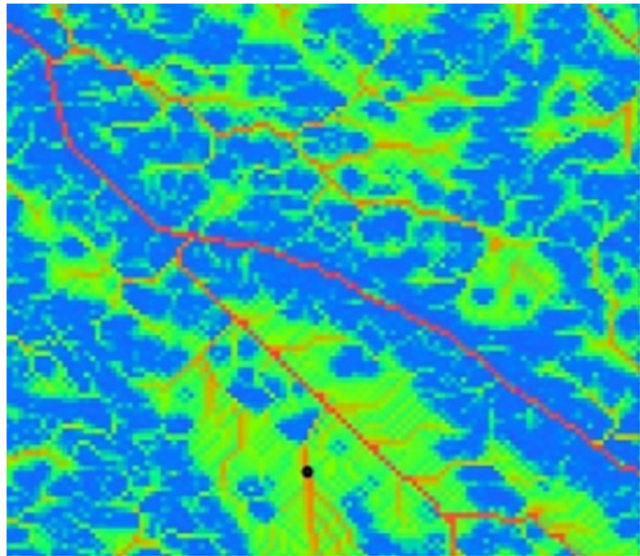
Example data to train models

- Locations of coconut farms and lands not suitable for non-coconut farms
- Average annual yields as the reference data for our analysis.

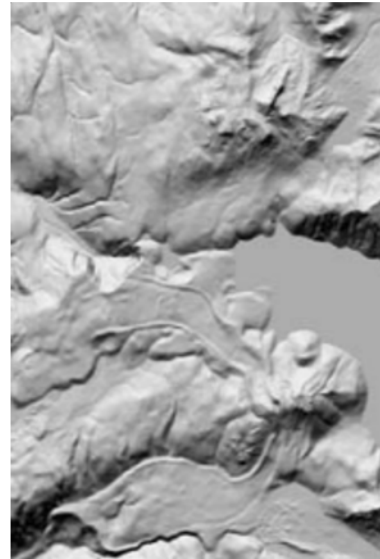


Example environmental datasets

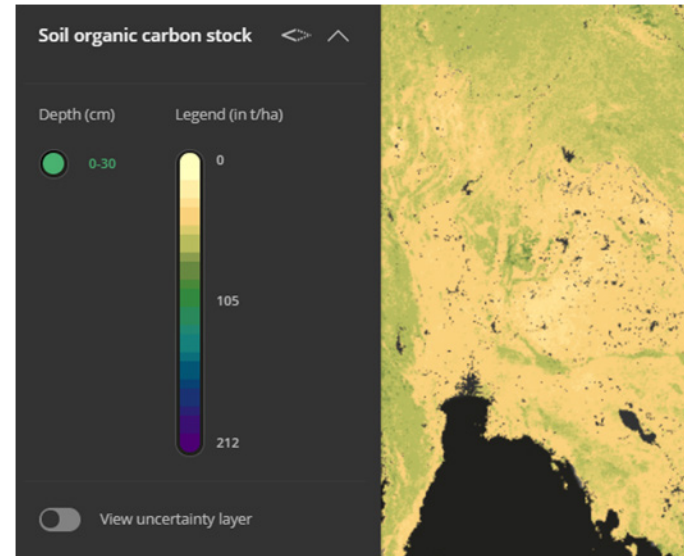
GLDAS-2.1: Global Land Data Assimilation System



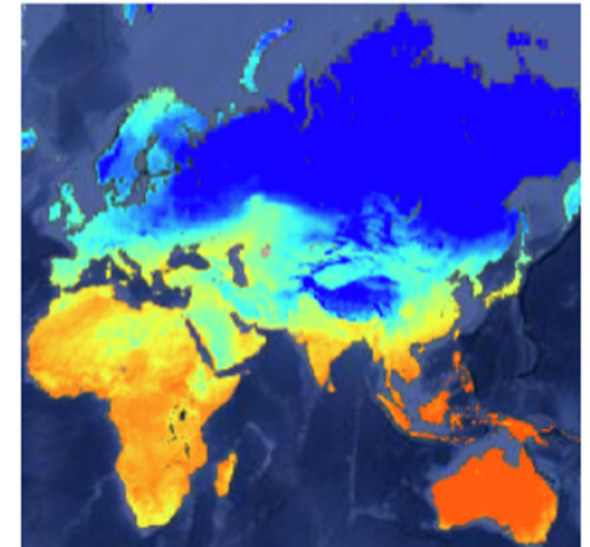
Wetness



Slope



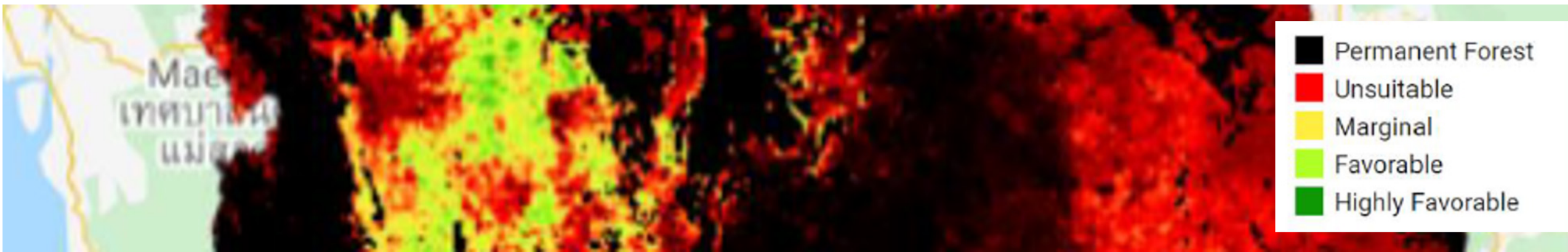
Soil properties



**Temperature
and humidity**

Results

- Models correctly predict traditional Nam Hom coconut growing areas as highly suitable.
- Models also suggest new areas that are potentially suitable that are similar in environmental conditions to the traditional Nam Hom areas.

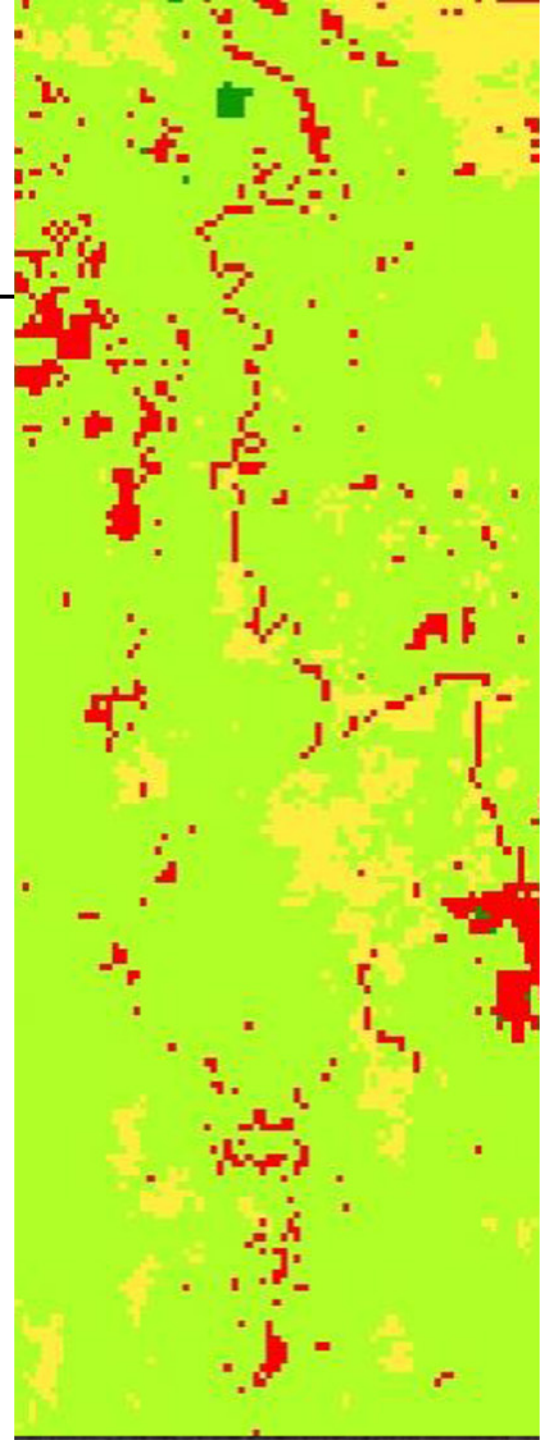


Uses of remote sensing technologies

- Sample-based inventory to monitor emissions from land use with photo-interpretation of high resolution images
- Verify land use history to track potential deforestation in supply chain
- Overlaying geospatial data can help to identify multiple wins: for example which lands are environmentally and socially suitable for intensification can lead to improvements to farmer livelihoods & increase carbon sequestration

Remote Sensing becoming more accessible

- Collect Earth Online merges multiple image data sets into one platform and is freely available. Interpretation of these time series can aid in monitoring greenhouse gas emissions.
- Publicly available, free environmental data (soils, land use, forest loss history, population density, precipitation, temperature, etc.) used to map suitable lands for crops.
- Cloud computing is accessible freely, through platforms such as Google Earth Engine, used to analyze all the available data and advances in machine learning.





SUSTAINABLE Coconut &
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Q&A



CLOSING



QUICK SURVEY





www.sustainablecoconutcharter.com



Nichapat Na Thalang
Partnerships and Sustainability Manager

nnathalang@pactworld.org

Ronnarit Chaiyosaeng
Event and Program Officer

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With support from



SUSTAINABLE Coconut & Coconut Oil Roundtable