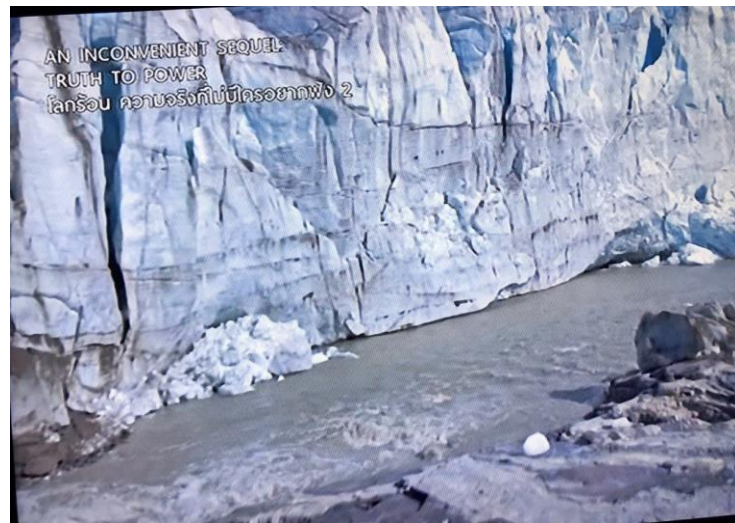


Activated Charcoal

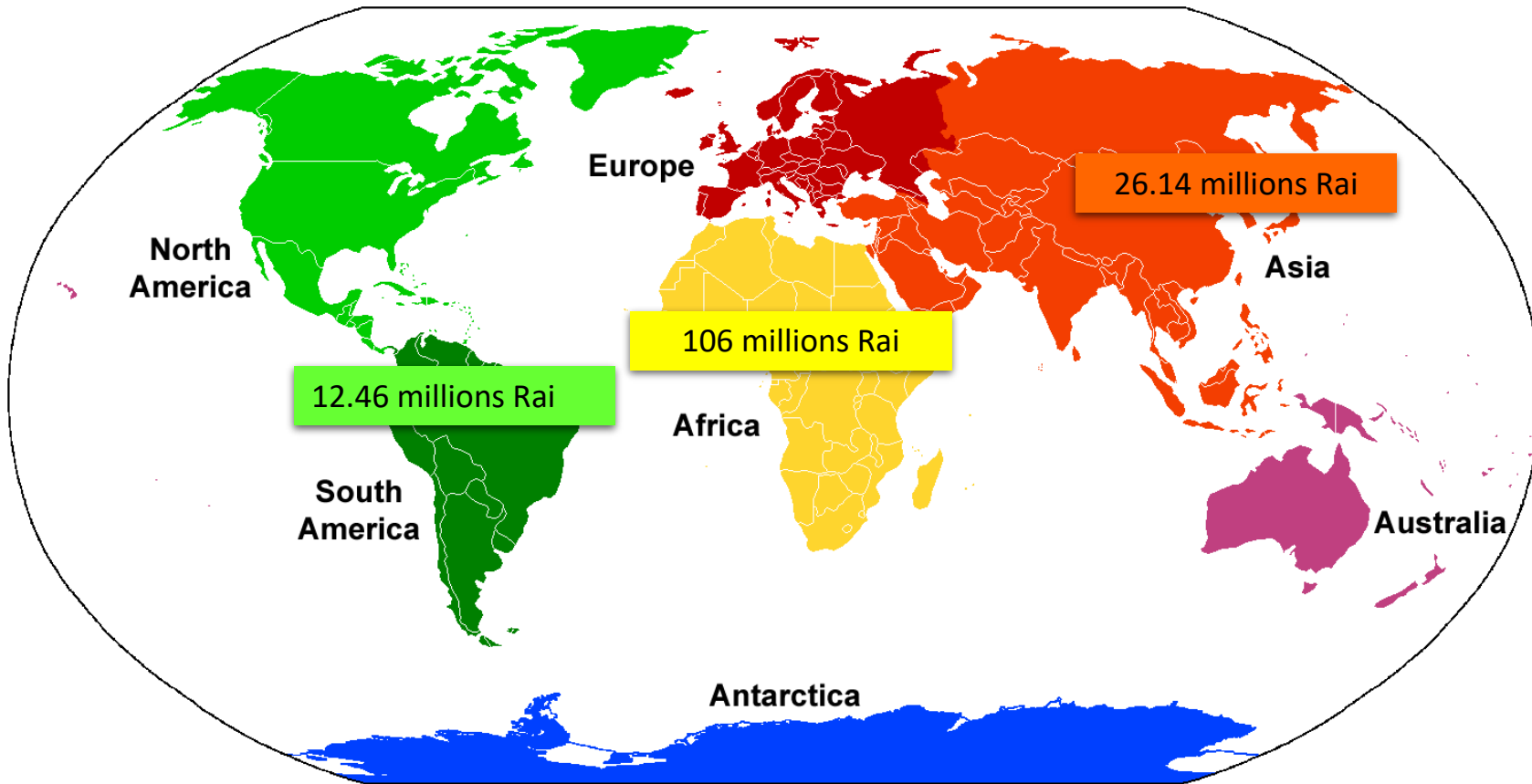
From *cassava stumps*



World ISSUE: *GLOBAL WARMING*



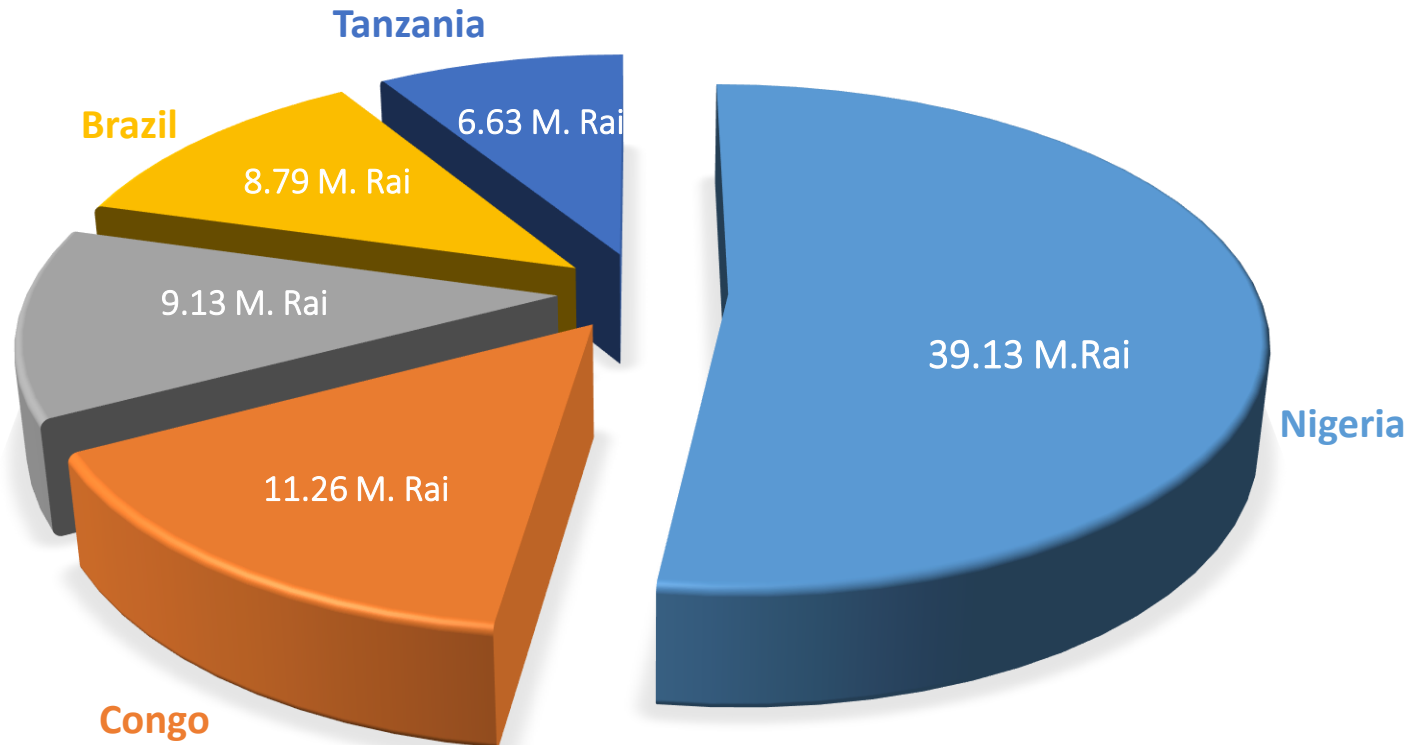
World's Cassava Plantation Area 2016



Thailand is the THIRD World's Cassava Harvested area



Thailand



Cassava Production in Thailand

- A tropical root crop grown for starch
- Harvested at age 10-12 months

Total cultivation area approx. 1 MHA
Total cassava roots approx. 30 MMT/year
Total cassava stumps approx. 5.5 MMT/year



Cassava stumps



Cassava leaves:
Animal feed

Cassava stems:
Planting stake

Cassava roots:
*Starch and
Animal feed*

Cassava stumps/carelessly burnt/environmental pollution/affect people health

From OPEN-BURNING TO...***GLOBAL WARMING***

Cassava stumps are being dumped as waste around *5 million tons* per year.

Burning cassava stumps emits *15 million metric tons of CO₂* a year.



“TOOLS to STOP open burning”

“From Cassava stumps... To *ACTIVATED CHARCOAL*”



“TURNING ACRISS INTO
AN OPPORTUNITY FOR
COMMUNITY & SUSTAINABILITY”





From OPEN-BURNING TO... GLOBAL WARMING

RICE STRAW PER YEAR : 42 Million Tons

OPEN-BURNING : 29 Million Tons

= 27 Million CO_2 Emission



“TOOLS to STOP open buriiing”

“From Rice straw...

“To Non-toxis acid & TCF Virgin pulp”





3 BECOME 1

*****Reduce poverty 20,000 households*****

*****Reduce 100,000 tons carbon of Carbon dioxide*****

*****By 2025*****



- Founder of *TOM CASAVA*
- Produce activated charcoal from casava stumps

AWARD:

- GCIP Thailand *Winner* 2016
- GCIP Global *Runner-Up* Award 2017
- 2 nd Runner-up 7 Innovation Awards 2019 Social type
- Thai-BISPA Awards 2019
- 2019 AABI Torch Award for Promising Entrepreneur at Hong kong



- Founder of Fangthai Factory
- Produce non-toxic acid and TCF virgin pulp from rice straw and biodegradable Packaging

AWARD:

- *Winner* SEED Low Carbon Awards 2019
- Category *Winner*: Waste Beneficiation Award @The Cleantech Open Global Forum 2018



❖ GCIP Alumni 2017



- Researcher and Product developer
- Medical supplies From agricultural products And herbs of Thailand

AWARD:

- *Winner* Agri plus Awards Thailand 2019 And Demark 2019



❖ GEF UNIDO Cleantech Programme for SMEs in Thailand 2019

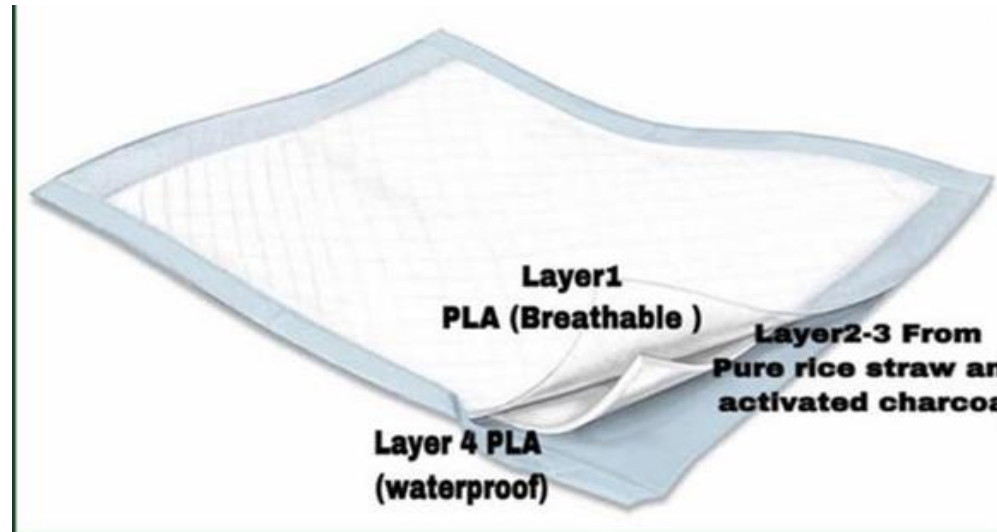




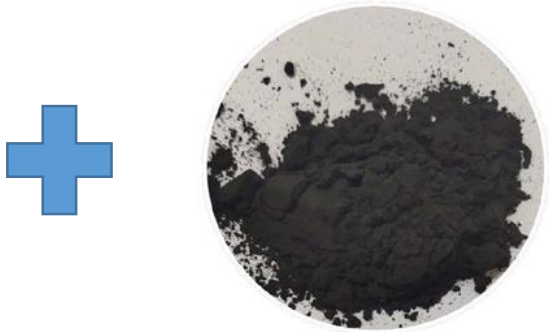
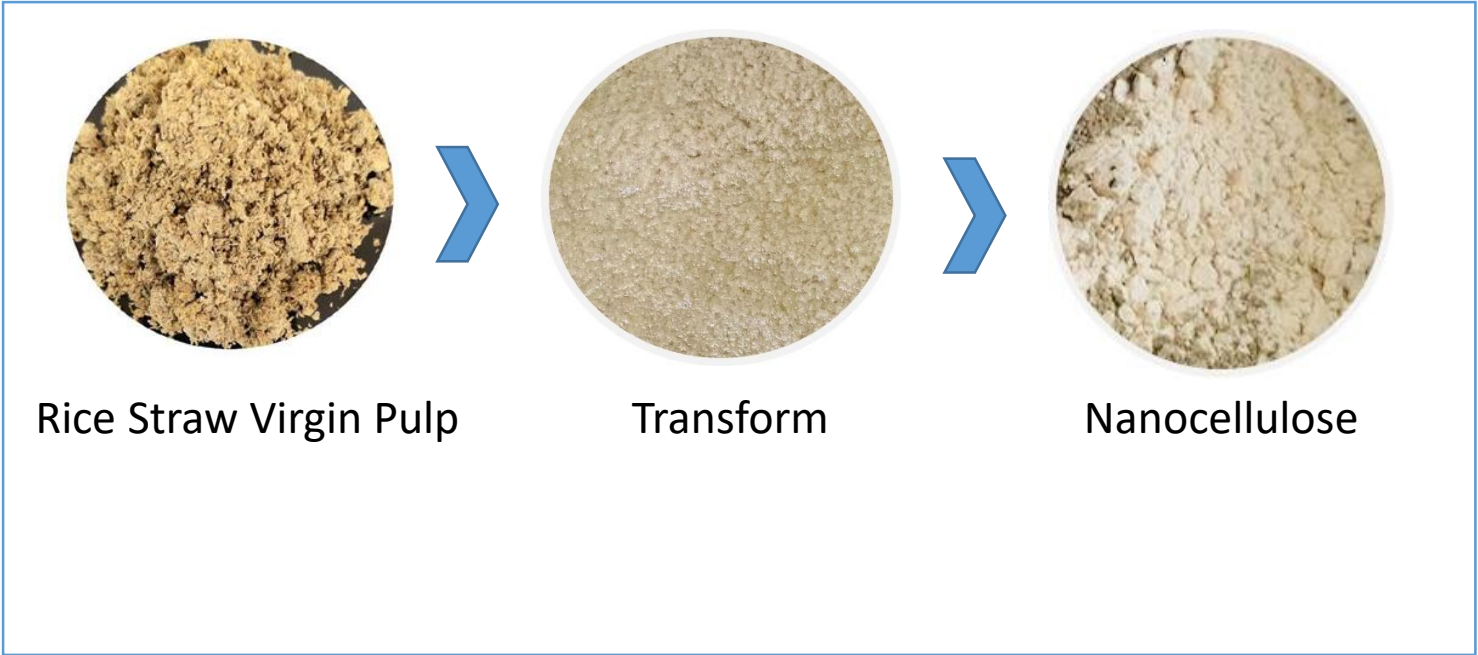
អង្គការ OceanAsia រៀបចំ Naomi Brannan

GREEN GUARD V

adult *diapers and incontinence pads* for seniors



From *AGRI-WASTE* to MELTBLOWN



Activated Charcoal from Cassava Stumps



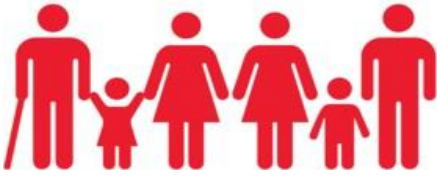
100% Biodegradable
“Melt blown from natural fibre”

เป้าหมายการพัฒนา

Sustainable Development Goals (SDGs)



1 NO POVERTY



ขจัดความยากจน NO POVERTY



2 ZERO HUNGER



ยุคความหิวโหย ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



สุขภาพและความเป็นอยู่ที่ดี GOOD HEALTH AND WELL-BEING



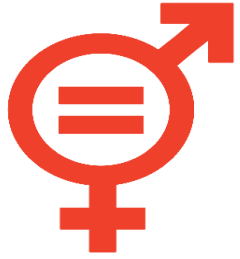
4 QUALITY EDUCATION



การศึกษาที่มีคุณภาพ QUALITY EDUCATION



**5 GENDER
EQUALITY**



ความเสมอภาคทางเพศ

GENDER EQUALITY



8 DECENT WORK AND ECONOMIC GROWTH



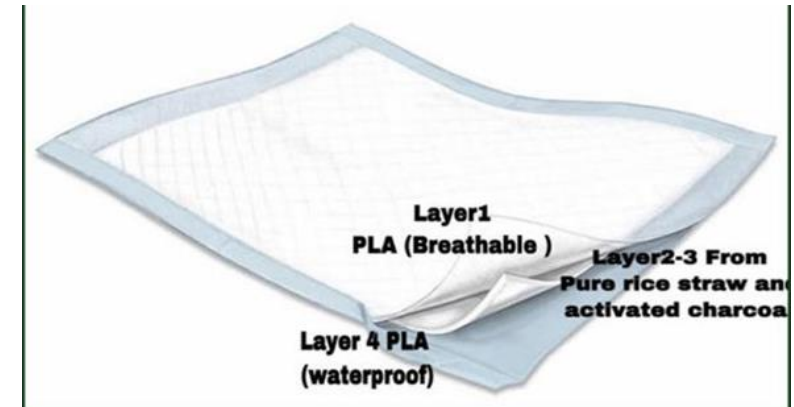
งานที่ดีและการเติบโตทางเศรษฐกิจ DECENT WORK AND ECONOMIC GROWTH





นวัตกรรมและโครงสร้างพื้นฐาน

INDUSTRY , INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



ลดความเหลื่อมล้ำ

REDUCED INEQUALITIES





ชุมชนที่ยั่งยืน

SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



บริโภคและผลิตอย่างมีความรับผิดชอบ

RESPONSIBLE CONSUMPTION AND PRODUCTION



รับมือกับการเปลี่ยนแปลงภูมิอากาศ

CLIMATE ACTION



42 million tons carbon

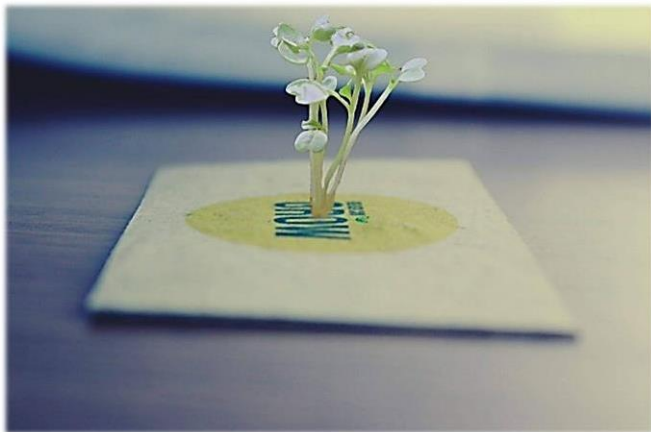


14 LIFE BELOW WATER



ใช้ทรัพยากรทางทะเลอย่างยั่งยืน

LIFE BELOW WATER





ใช้ระบบนิเวศบนแผ่นดินอย่างยั่งยืน

LIFE ON LAND



17 PARTNERSHIPS FOR THE GOALS

ความร่วมมือเพื่อความยั่งยืน

PARTNERSHIPS FOR THE GOALS



Thailand



Material ConneXion®



ECOTOPIA



SEED promoting entrepreneurship for sustainable development

Established by



Funded by



Hosted by



Our products *isn't only* tangible product, BUT, it also creates **AWARENESS** to people around the **WORLD** about **ENVIRONMENTAL Issue.**



3 BECOME 1

ผลิตภัณฑ์ของเราไม่ได้เป็นเพียงผลิตภัณฑ์ที่จับต้องได้ แต่ยังสร้างความตระหนักถึงผู้คนทั่วโลกเกี่ยวกับปัญหาสิ่งแวดล้อม.



3 BECOME 1 would like to support **Paris Agreement**

(United Nation framework convention on climate change : UNFCCC)