

What's on your mind when you hear:

Peatland or “lahan gambut”?



Pristine
forest

Free form
fires

Carbon stock

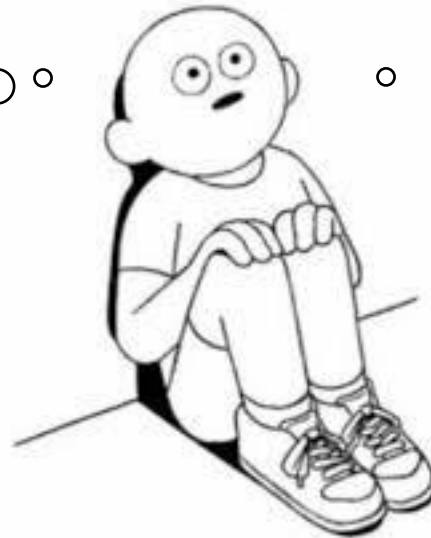
Prosperous
people

Oil palm
expansion

Fires and
smokes

Carbon
emission

Failed Mega
Rice Project



Peatland utilization = negative impact





detikNews

Kamis, 11 Jun 2020 09:19 WIB

Potret Kebakaran Lahan Gambut di Aceh Barat

Kebakaran lahan gambut di Aceh Barat, terus meluas. Meluasnya area yang terbakar ini diakibatkan angin kencang disertai suhu udara panas.

Selasa 11 Agustus 2020, 08:43 WIB

'Food Estate' di Kalteng Picu Konflik dan Kerusakan Lingkungan

mediaindonesia.com | Politik dan Hukum

Kabut Asap Kian Parah, Malaysia Tutup 145 Sekolah

CNN Indonesia | Selasa, 17/09/2019 10:43 WIB

Bagikan :



NEWS 1 tahun lalu

FOTO: Aktivitas Warga Riau Terganggu Akibat Kabut Asap



Proyek Lahan Gambut Sejuta Hektar, Gagal

Oleh : Tempo.co

Rabu, 8 Oktober 2003 15:50 WIB

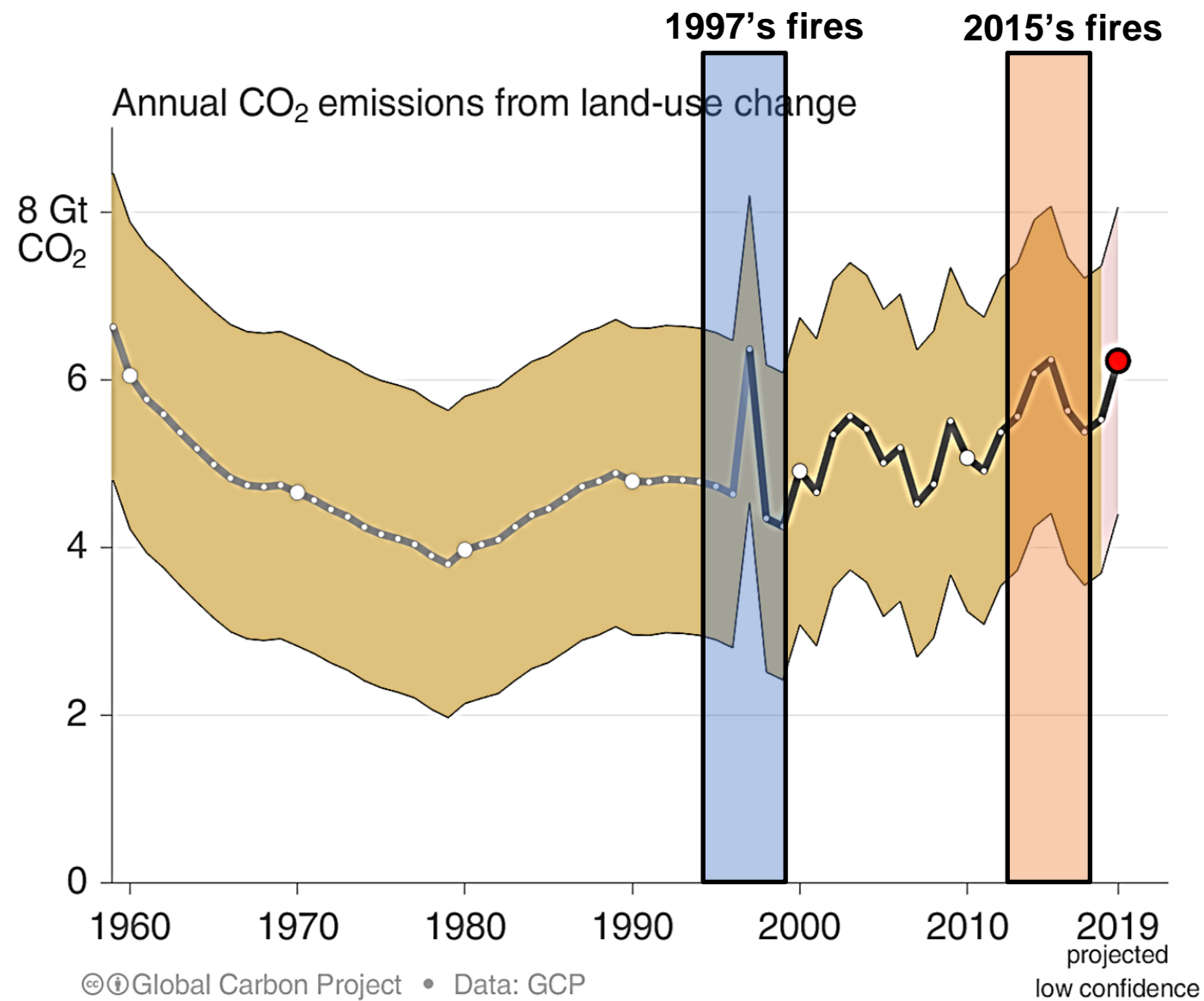


PERISTIWA 1 tahun lalu

Kadishut: Kabut Asap Akibat Kebakaran Lahan Gambut akan Abadi

Kalau pemadaman melalui water bombing dengan dana ratusan miliar pun hanya akan memadamkan di permukaan lahan gambut saja.

Peatland fire contribution to global GHG emission



But, not all peatland utilization is bad!



Really? ~~That sounds like a hoax.~~



Nurul Ihsan Fawzi



Annisa Noyara R.

**An integrated water resource
management for sustainable peatland
management on coconut agriculture in
Indonesia**

Where?



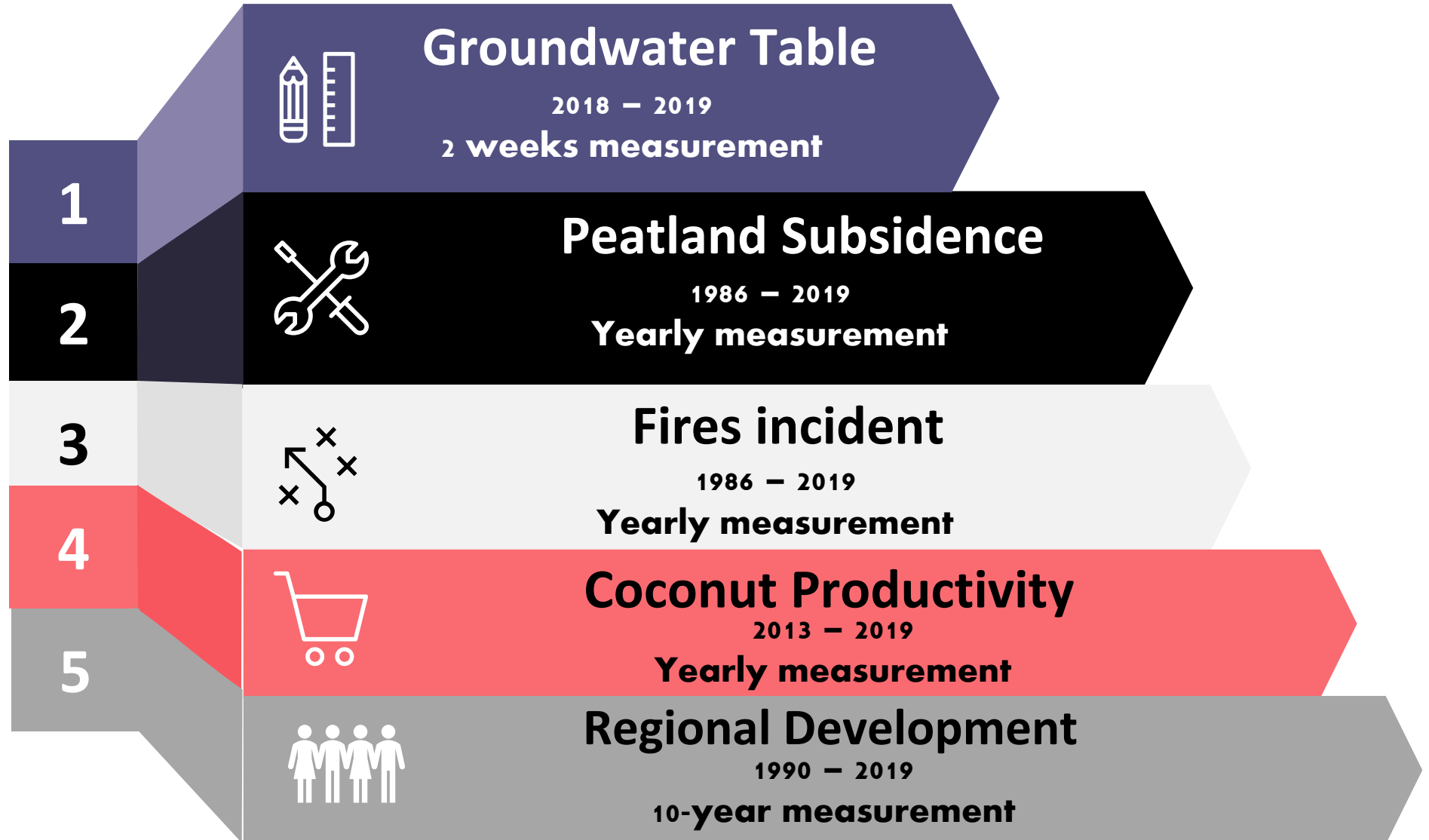
Pulau Burung is a very large
producer of coconut.
1/10 Indonesian's coconut
production is from this region.

Objective:
To examine and learn the practice
of coconut agriculture in peatland in
Indonesia that can contribute to
sustainability.



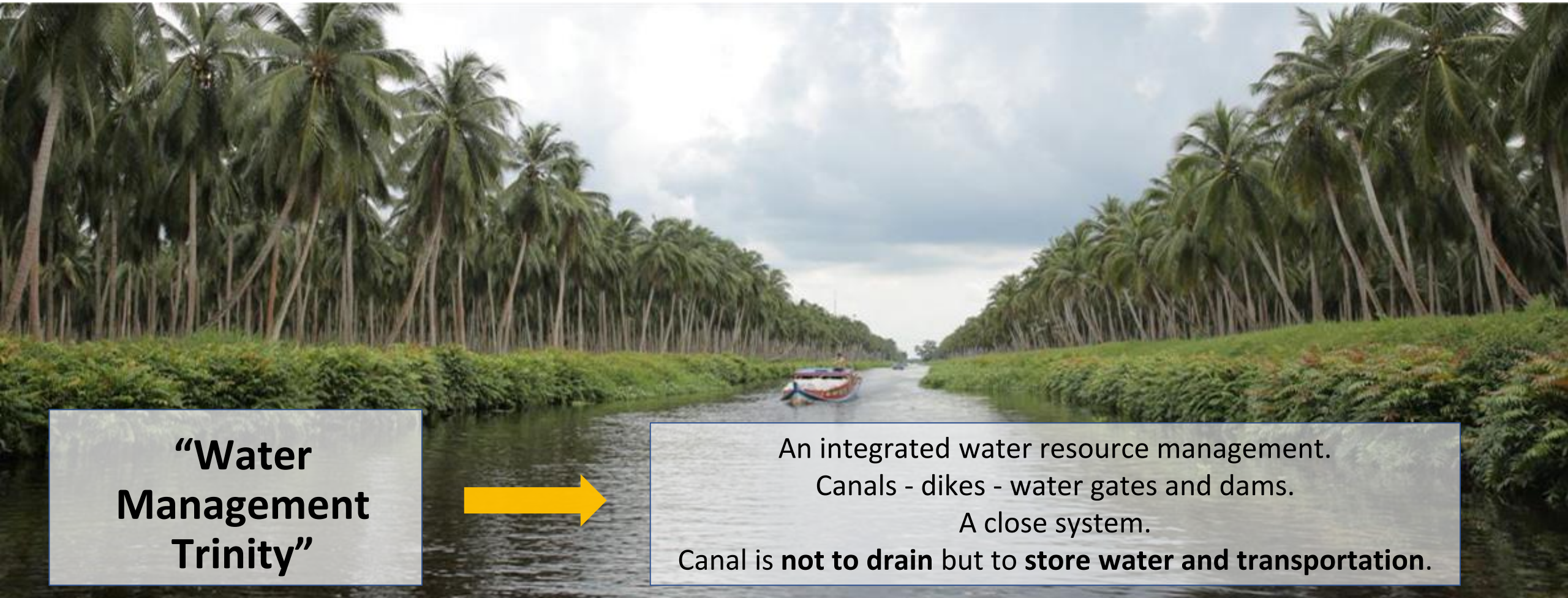
How?

SUSTAINABILITY PARAMETERS



Result

Groundwater Table



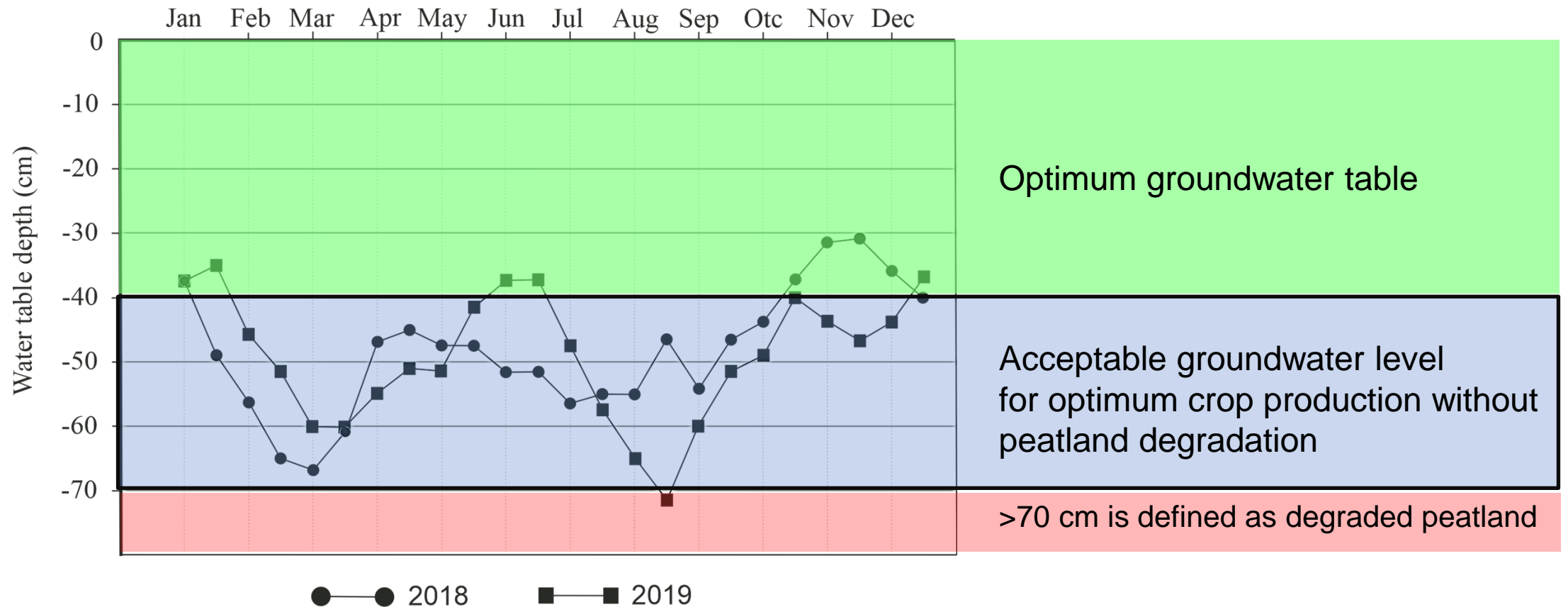
**“Water
Management
Trinity”**



An integrated water resource management.
Canals - dikes - water gates and dams.
A close system.
Canal is **not to drain** but to **store water and transportation**.

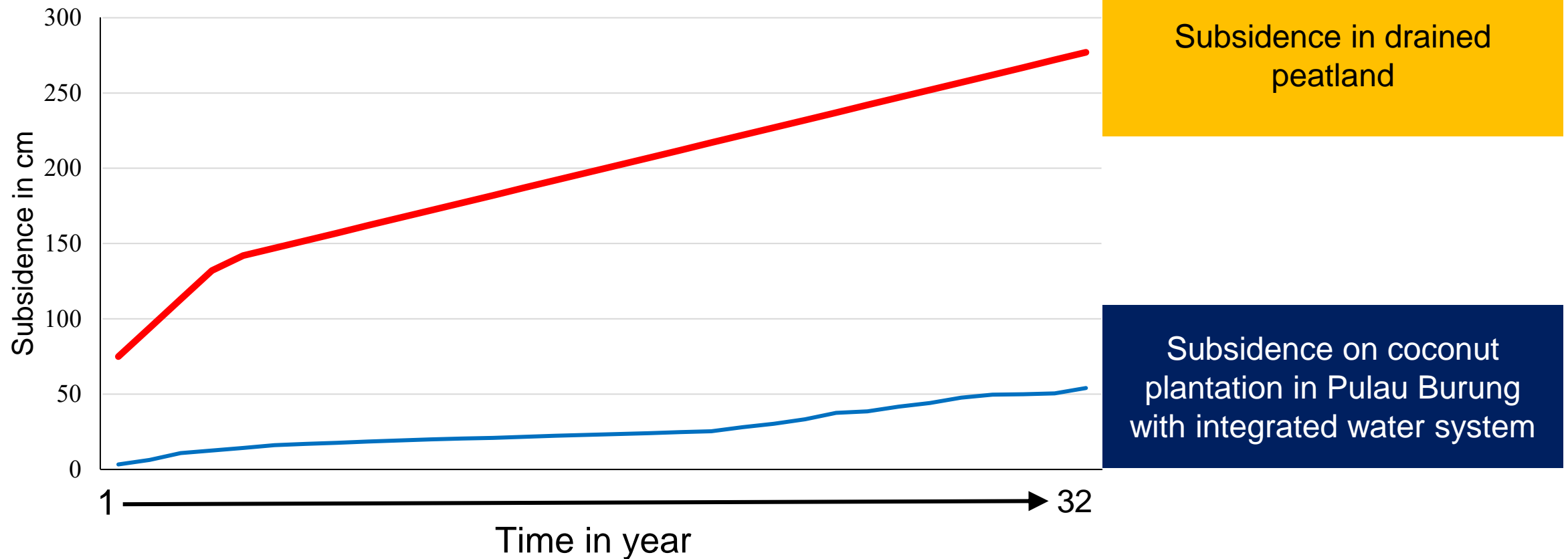
Result

Groundwater Table



Result

Peatland Subsidence



Result

Fires Incident

Controlled groundwater level

Keep the soil moist

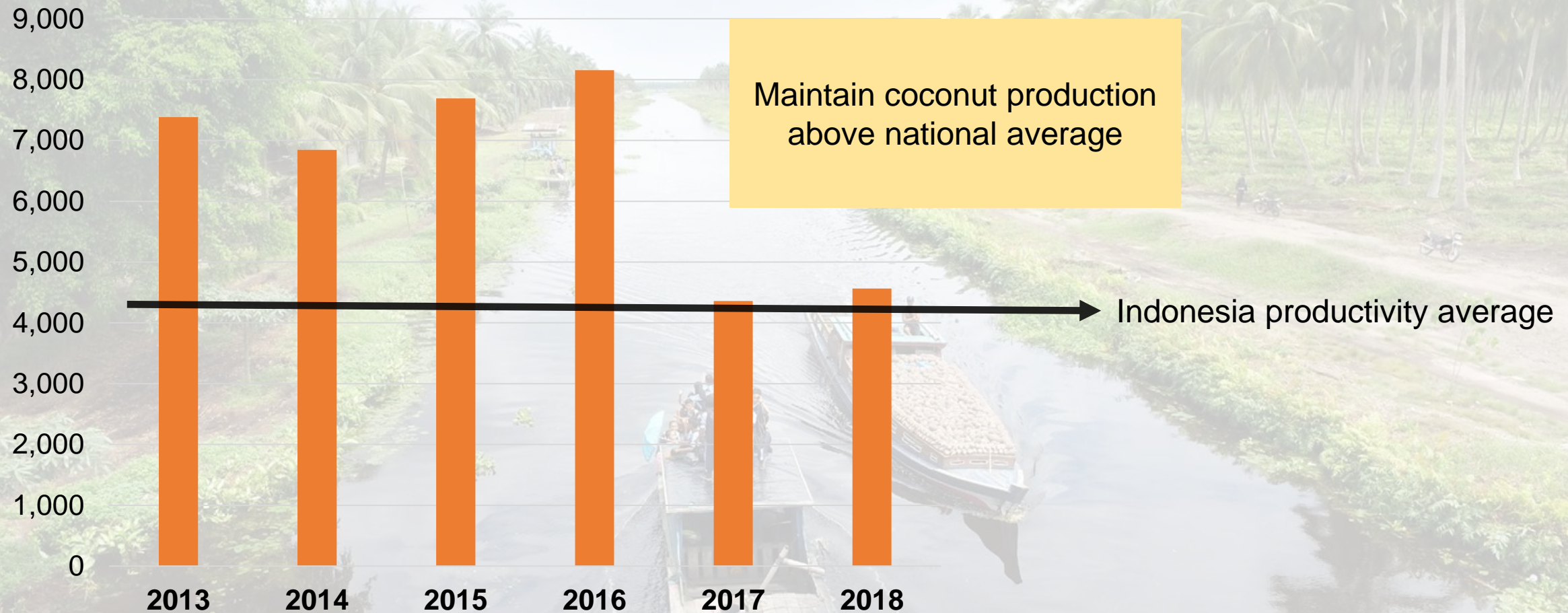
Balance the
requirement for soil
moisture and crop
growth

Very low fire risk

**No large fires since
1986**

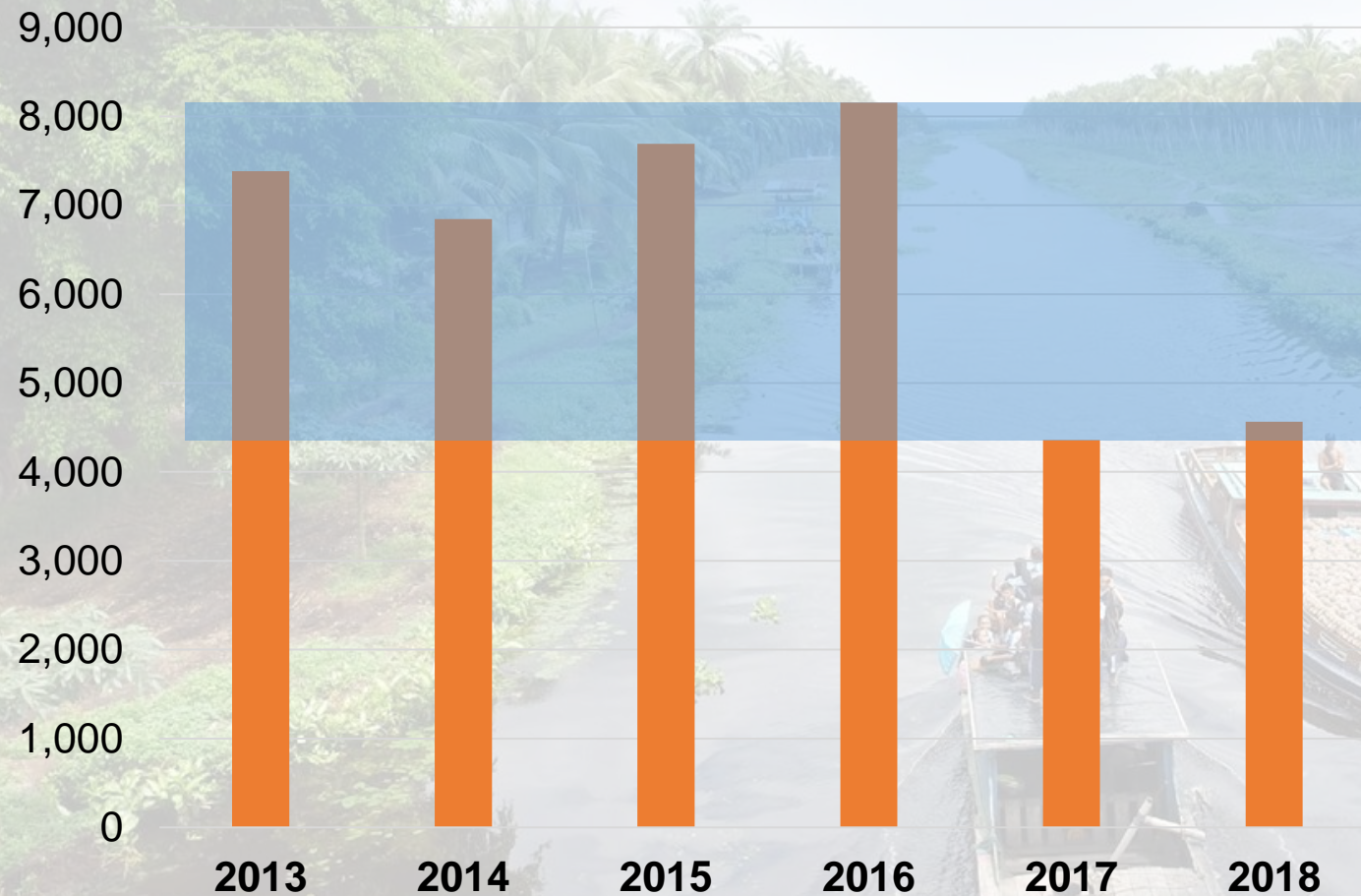
Result

Coconut Productivity



Result

Coconut Productivity



Variability due to climate, such as monsoon.

Result

Regional Development

Increasing population in 3 coconut producer districts (Pulau Burung, Teluk Belengkong, & Kateman)

Kateman District
Pop. 42,843

Pulau Burung and
Teluk Balengkong are
villages under
Kateman.

2000s

Total Pop.
69,015

Pulau Burung and
Teluk Balengkong
become districts.

Total Pop.
Pop. 81,522

2019

Total Pop.
Pop. 84,484

1990s

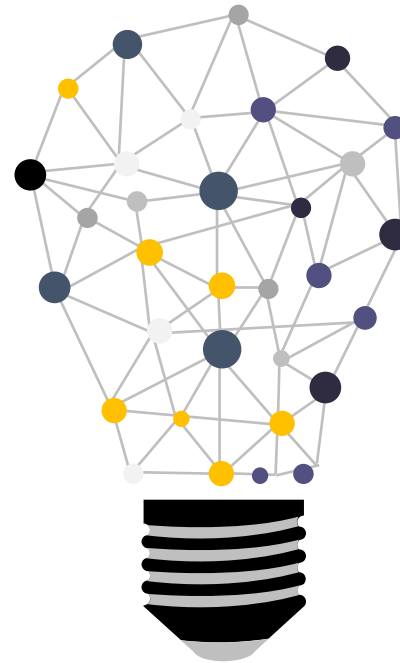
2010s

Conclusion

“Regulating the water in peatland, not draining”

- the key to sustainability

High groundwater table means **low** subsidence rate and **low risk of fire**



“Maintain coconut production above national average”

- economic benefit

Sustainable agriculture and development **bring welfare to people**

“When you make a choice, you change the future.”

- Julien Smith, The Flinch!

