



KOPEL

Climakers 2021

**Community Cooperative
Batu Puteh
Kinabatangan**





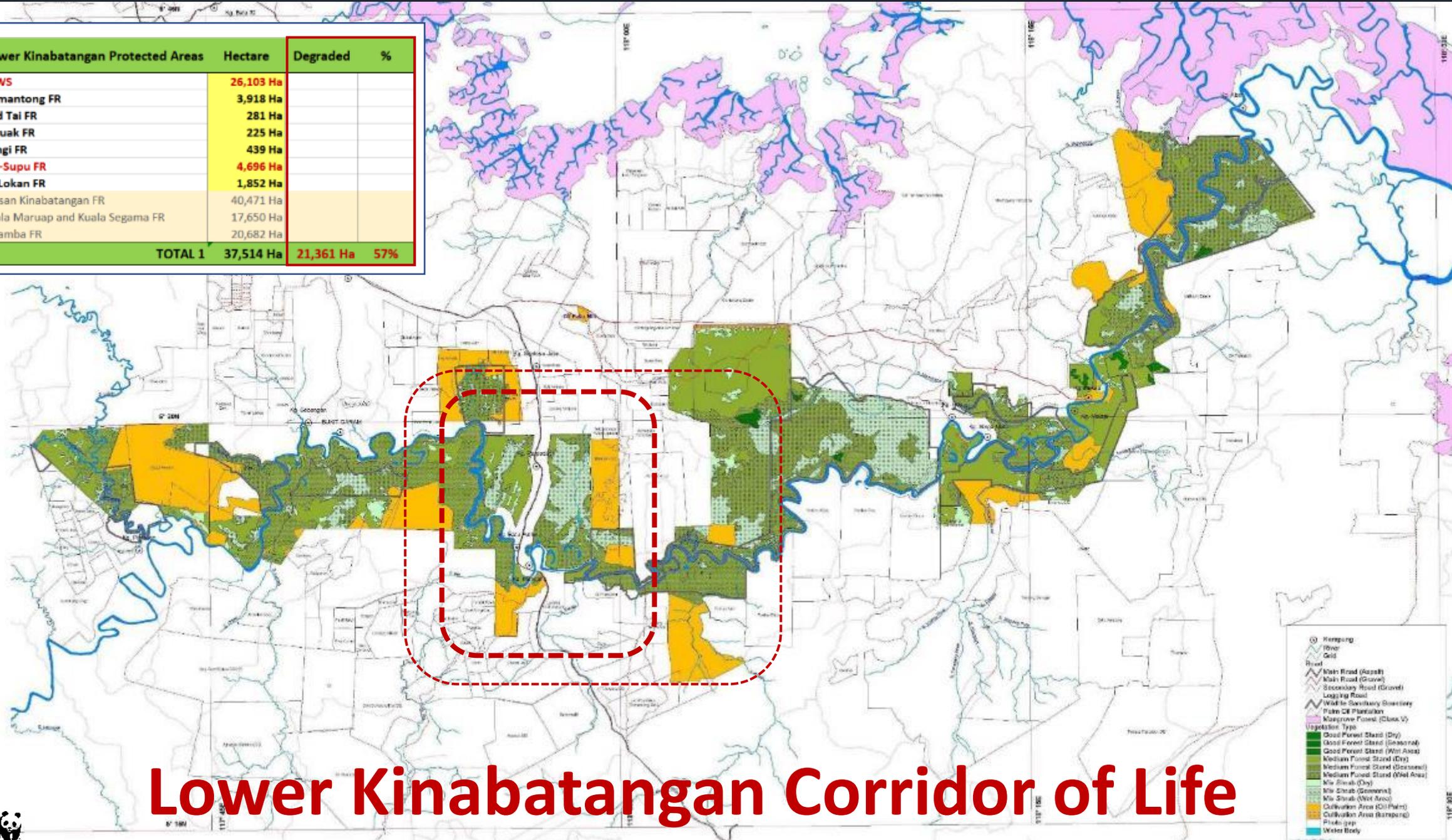








Lower Kinabatangan Protected Areas	Hectare	Degraded	%
LKWS	26,103 Ha		
Gomantong FR	3,918 Ha		
Bod Tai FR	281 Ha		
Keruak FR	225 Ha		
Pangi FR	439 Ha		
Pin-Supu FR	4,696 Ha		
Sg Lokan FR	1,852 Ha		
Trusan Kinabatangan FR	40,471 Ha		
Kuala Maruap and Kuala Segama FR	17,650 Ha		
Kulamba FR	20,682 Ha		
TOTAL 1	37,514 Ha	21,361 Ha	57%



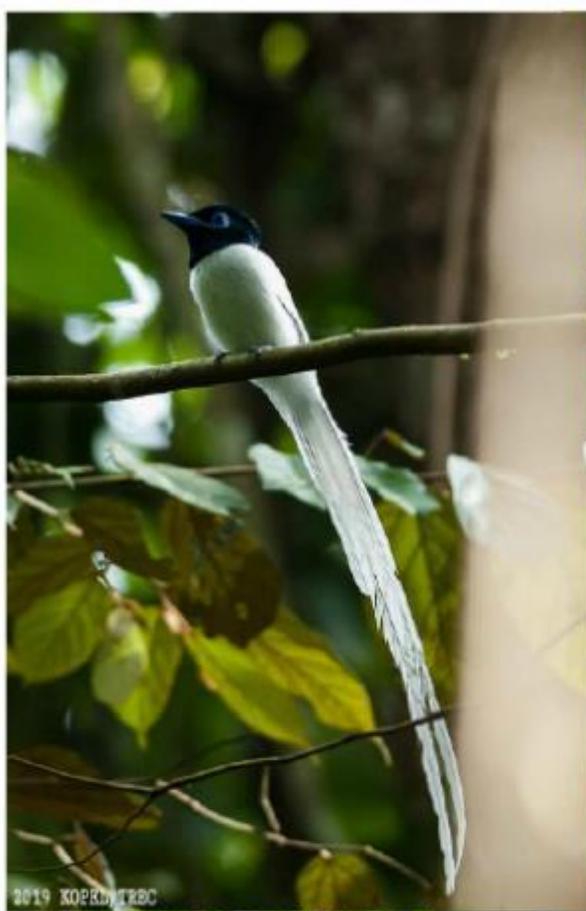
Lower Kinabatangan Corridor of Life





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Morsalleh 2019 KOPEL/TEEC



Morsalleh 2019 KOPEL/TEEC



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MORSALLEH 2019



Morsalleh 2019 KOPEL



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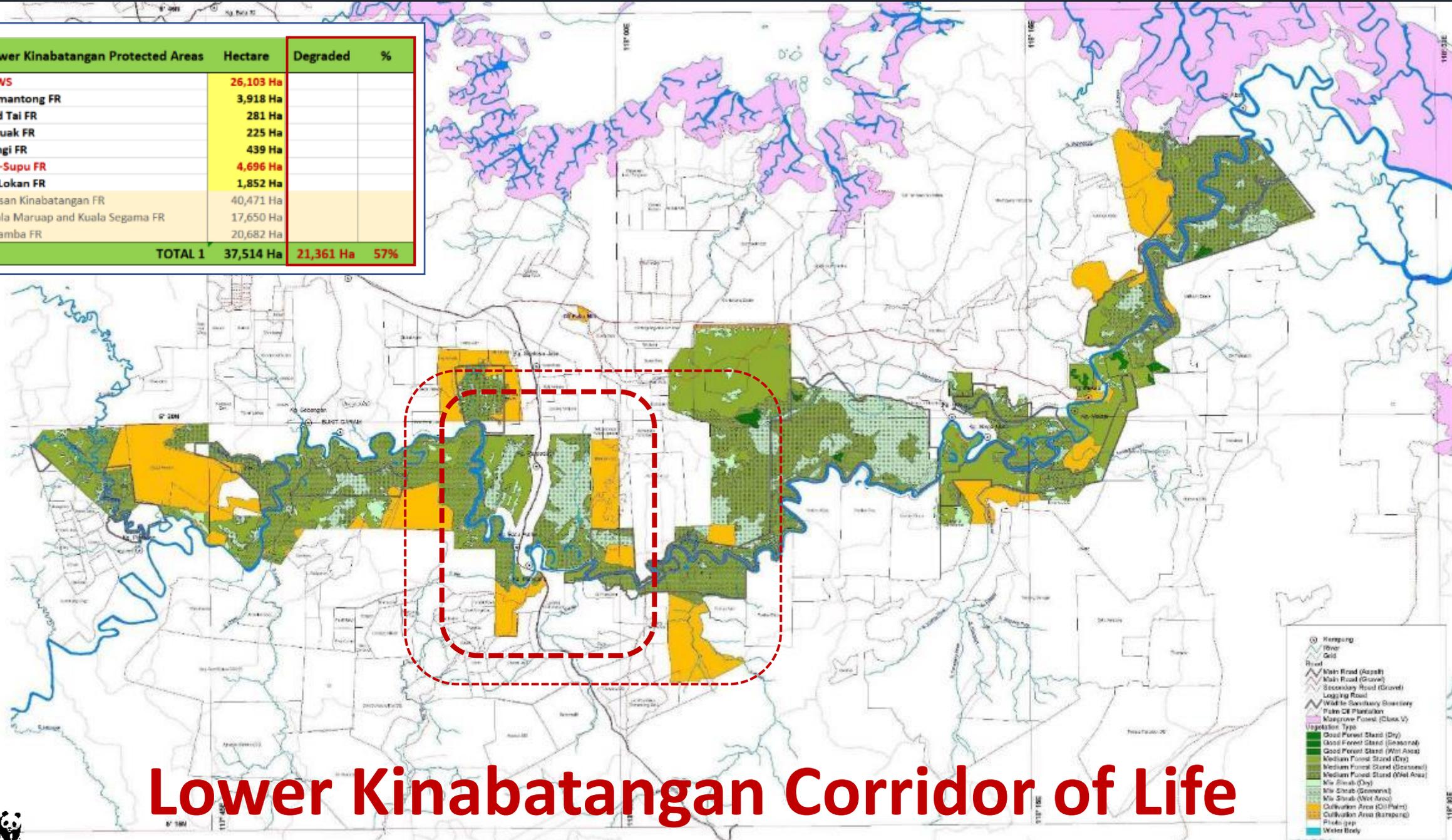


Morsalleh 2019 KOPEL/TEEC





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Lower Kinabatangan Corridor of Life



All is not well in the Corridor of Life...

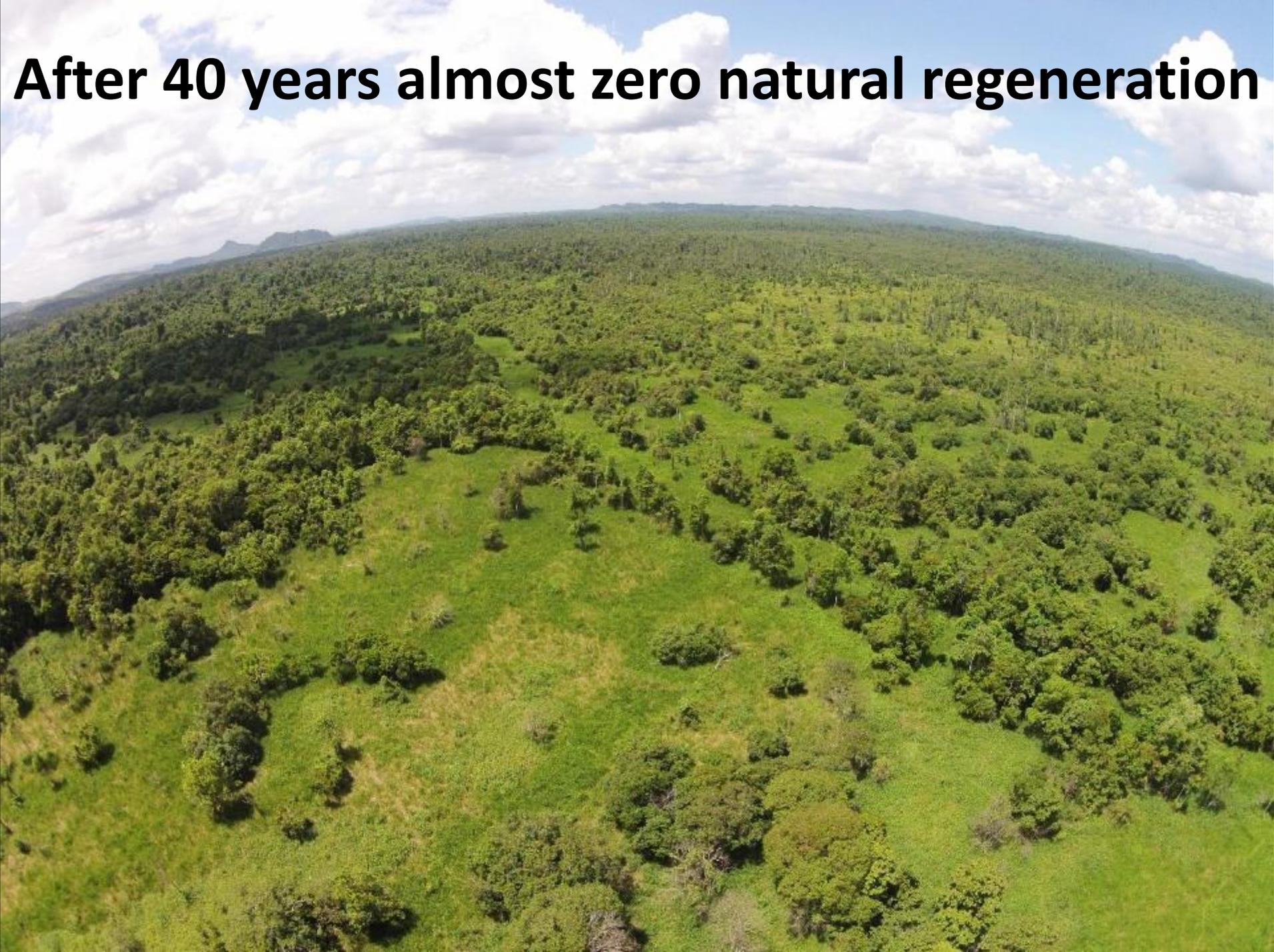


Lot 8 Lower Kinabatangan Wildlife Sanctuary 1998

Note **forest fire** follow logging roads



After 40 years almost zero natural regeneration



90% degraded



Ground zero...











Today





2007



2014



2013



2019



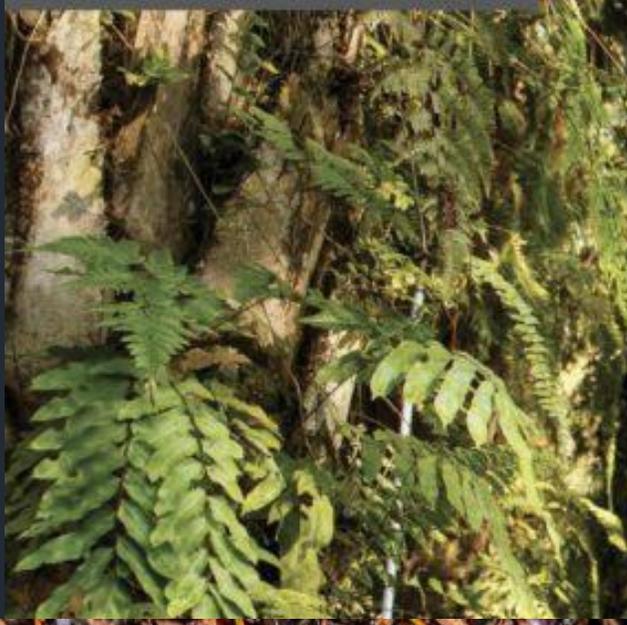
Table 1: Summary KOPEL Bhd Tree Planting Data PPH (1999 - 2020)

Partner Organisation	Location	Total Tree Planted	Ha	Species Planted
Discovery Channel (1999-2000)	PSFR B	6,250	15 ha	11
RICOH (Japan) (2001-2003)	PSFR A	6,364	16 ha	15
AAF & AF (2006-2008)	PSFR A	43,723	7 ha	11
International School Brunei	LKWS Lot 7	10,000	1 ha	13
American Forest 2009	PSFR A	51,594	6 ha	13
American Forest 2010	PSFR A	40,000	5 ha	12
Sabah Forest Department 2009	PSFR A	20,000	50 ha	23
Sabah Forest Department 2010	PSFR A	40,000	100 ha	12
Sabah Wildlife Department 2011	LKWS 7 & 6	6,240	30 ha	7
International School Brunei 2011	LKWS Lot 7	60,000	15 ha	5
Bring The Elephant Home 2013	LKWS Lot 7	20,000	4 ha	8
Bring The Elephant Home 2014	Ladang Kinabatangan	20,000	4 ha	7
Nestle Malaysia 2014	Ladang Kinabatangan	8,000	3 ha	7
Sabah Forest Department 2015	PSFR B	20,000	47 ha	12
KOPEL Bhd CBT Volunteers 2016	PSFR A / PSFR B	7,610	4 ha	7
Sabah Forestry Department 2017	PSFR B	6,081	8 ha	2
KOPEL Bhd CBT Volunteers 2017	PSFR A / PSFR B	5,835	6 ha	12
Sabah Forestry Department 2018	PSFR B	4,004	3 ha	3
KOPEL Bhd CBT Volunteers 2018	PSFR A / PSFR B	8,020	8 ha	12
Sabah Forestry Department 2019	PSFR B	1,150	16 ha	5
KOPEL Bhd CBT Volunteers 2019	PSFR A / PSFR B / Ladang K	6,701	4 ha	15
Sabah Forestry Department 2020	PSFR B	2,346	1 ha	5
KOPEL Bhd CBT Volunteers 2020	PSFR A / PSFR B / Ladang K	3,640	1 ha	15
Totals		397,558	353 ha	32









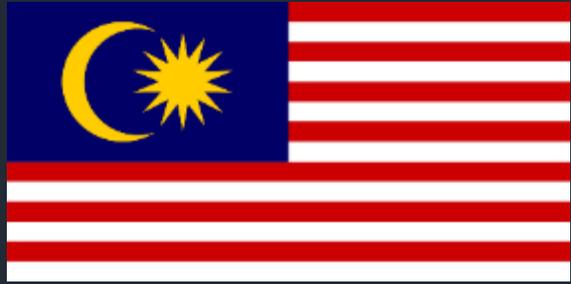
Palm Oil is a GLOBAL Product..... but has a bad reputation



...if it harms animals, people & our planet.



National and Global Standards for sustainable farming...



Malaysian Sustainable Palm Oil Standard (**MSPO**) for production, milling and supply chain.



Roundtable for Sustainable Palm Oil (**RSPO**) for production, milling and supply chain.



Conventional oil palm is not friendly to “soil microbes”



1

**Too much usage of agro-chemicals
such as Glyphosphate**

2

**Minimal ground cover and
low plant diversity**

3

**Soils compacted – reducing air
and water to soils and
increasing surface soil erosion**

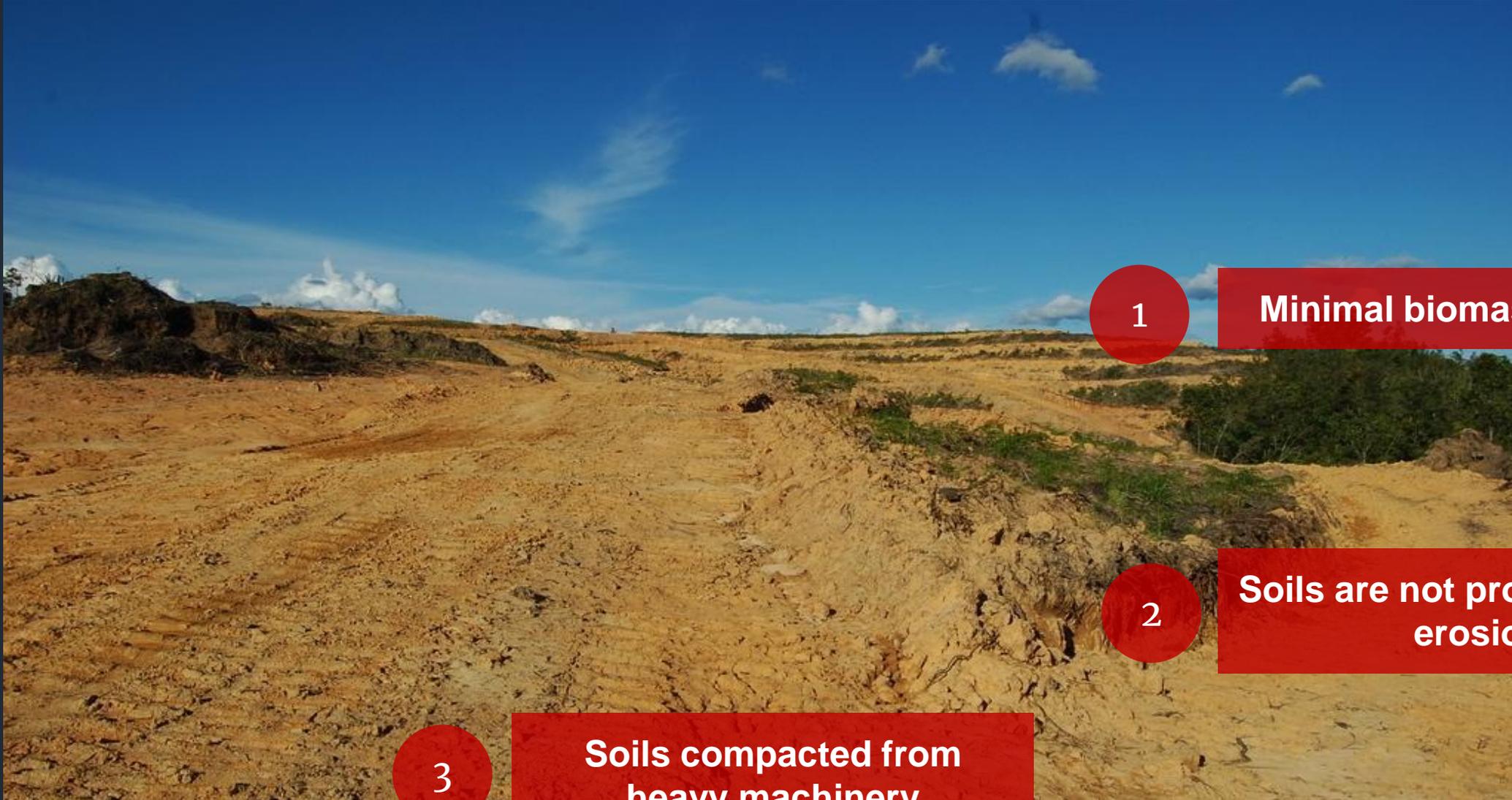
Conventional oil palm is not friendly to “soil microbes”



1 Too much nitrogen shuts down the natural carbon signals between plants-soil microbes

As much as **70% of nitrogen is loss** (volatization or leached) and is unavailable to plants

Conventional oil palm is not friendly to “soil microbes”



1

Minimal biomass remains

2

Soils are not protected from erosion

3

Soils compacted from heavy machinery

60 YEARS OF TOPSOIL LEFT



...AND MAYBE ONLY 30

United Nations Reports

Declining Insect Populations



Insect
Populations
have declined
by 57%
since 1989



NUTRIENT CYCLING



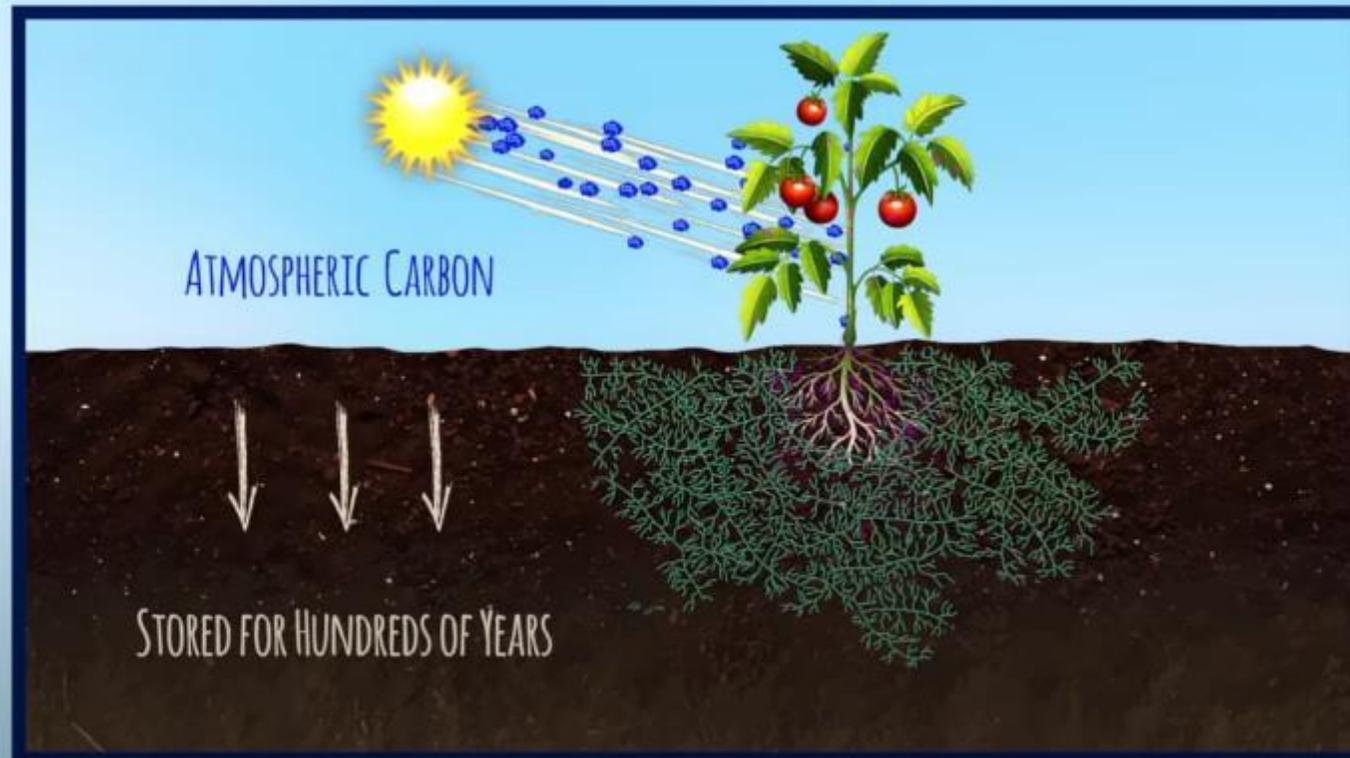
NUTRIENTS
ABSORBED



SUGARS & CARBS
RELEASED



SOIL CARBON SEQUESTRATION



Wild Asia Group Scheme



Since 2003

Support local farmers get certified as a GROUP to meet Malaysian MSPO standards and ultimately to attain premium prices

So far uptake in our community MSPO is 20%

KOPEL decides to create a group amongst our Co-op Members, to support their efforts and the movement towards Certification MSPO, which basically means supporting them towards meeting sustainability standards









KOPEL kompos¹

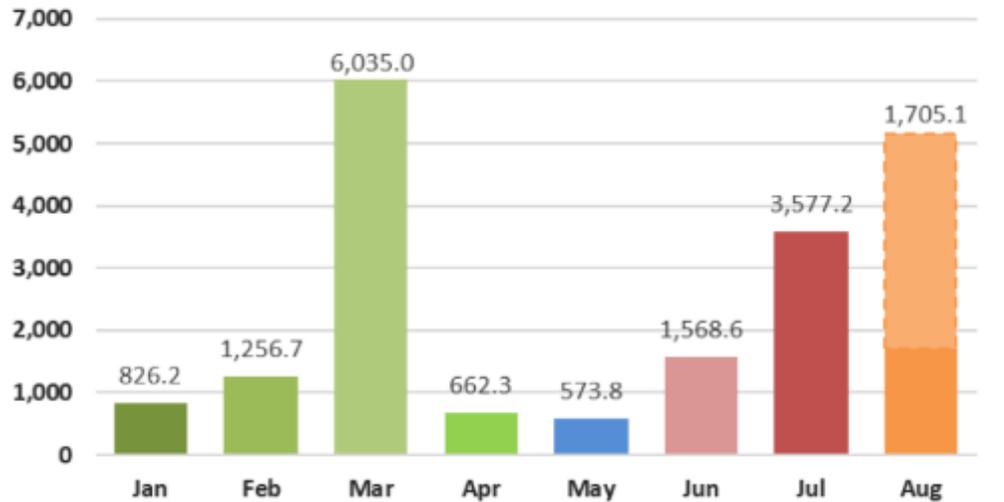
PERAPI TANAH

KOPEL BioJus⁴

BAHAN CUCIAN DAN BAJA ORGANIK

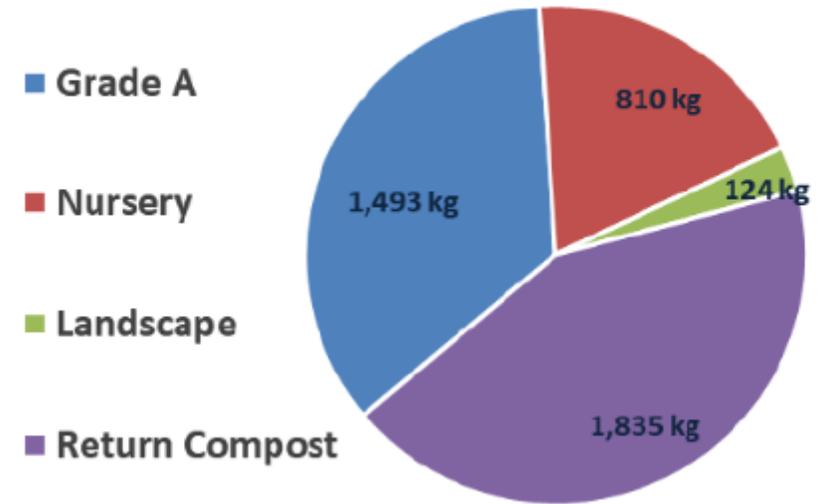


Green Waste - Kilograms



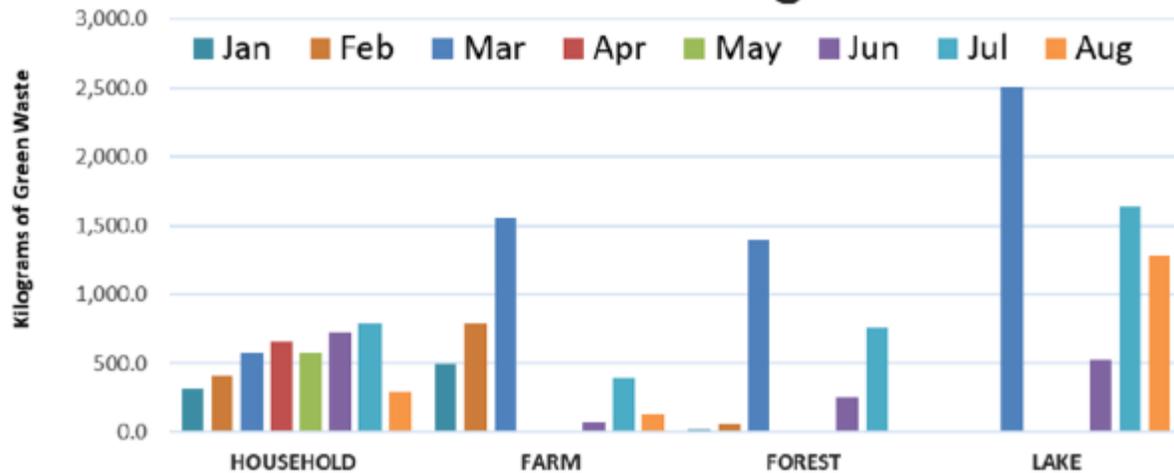
Source Data: KOBO Collect

Compost Outputs - Kilograms



Source Data: KOBO Collect

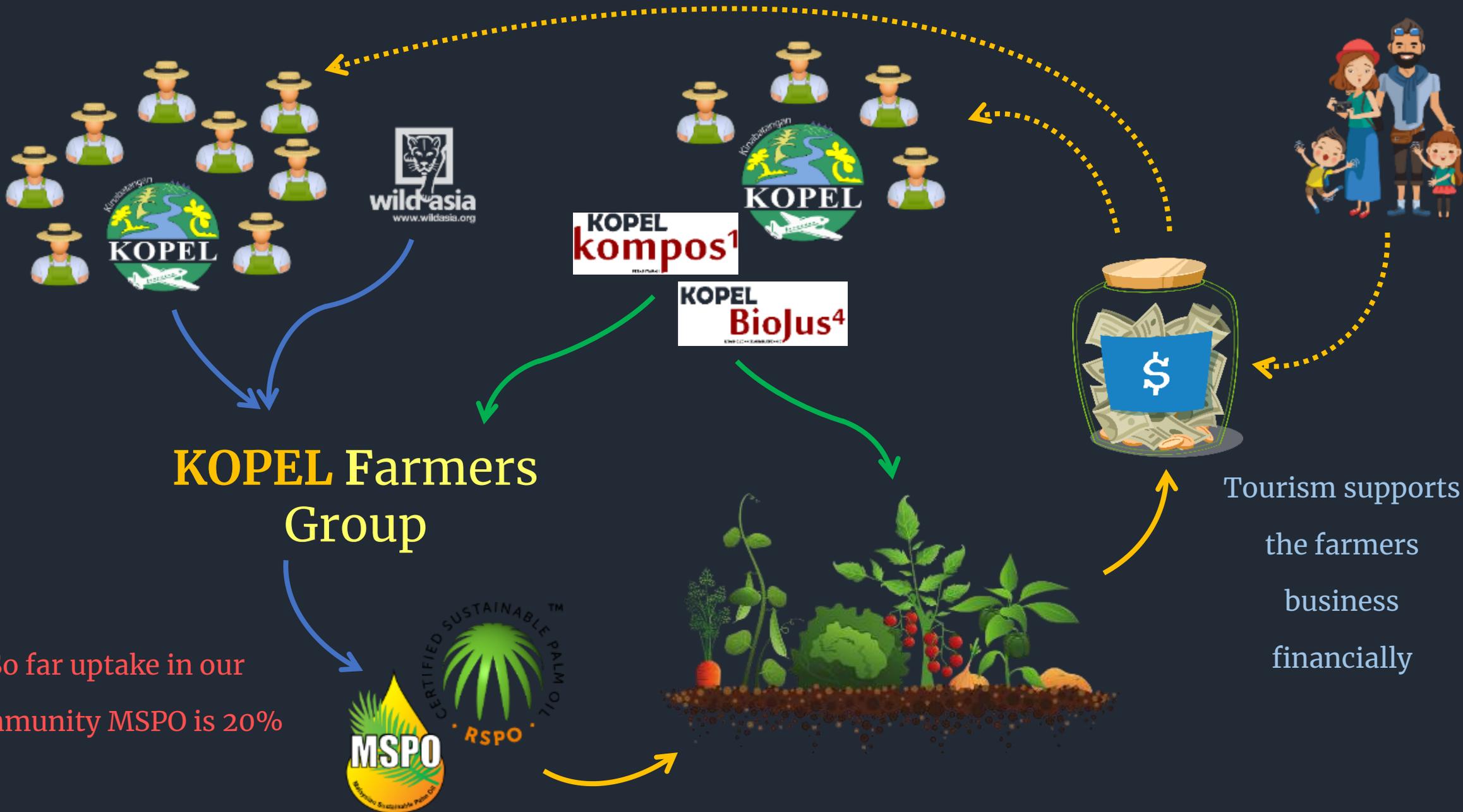
Green Waste - Kilograms



Source Data: KOBO Collect

So far finished dry compost = 2,427kg

Conversion Rate = Approx **15%** of input
Green Waste



KOPEL Farmers Group

So far uptake in our community MSPO is 20%

Tourism supports the farmers business financially



THANK YOU...