



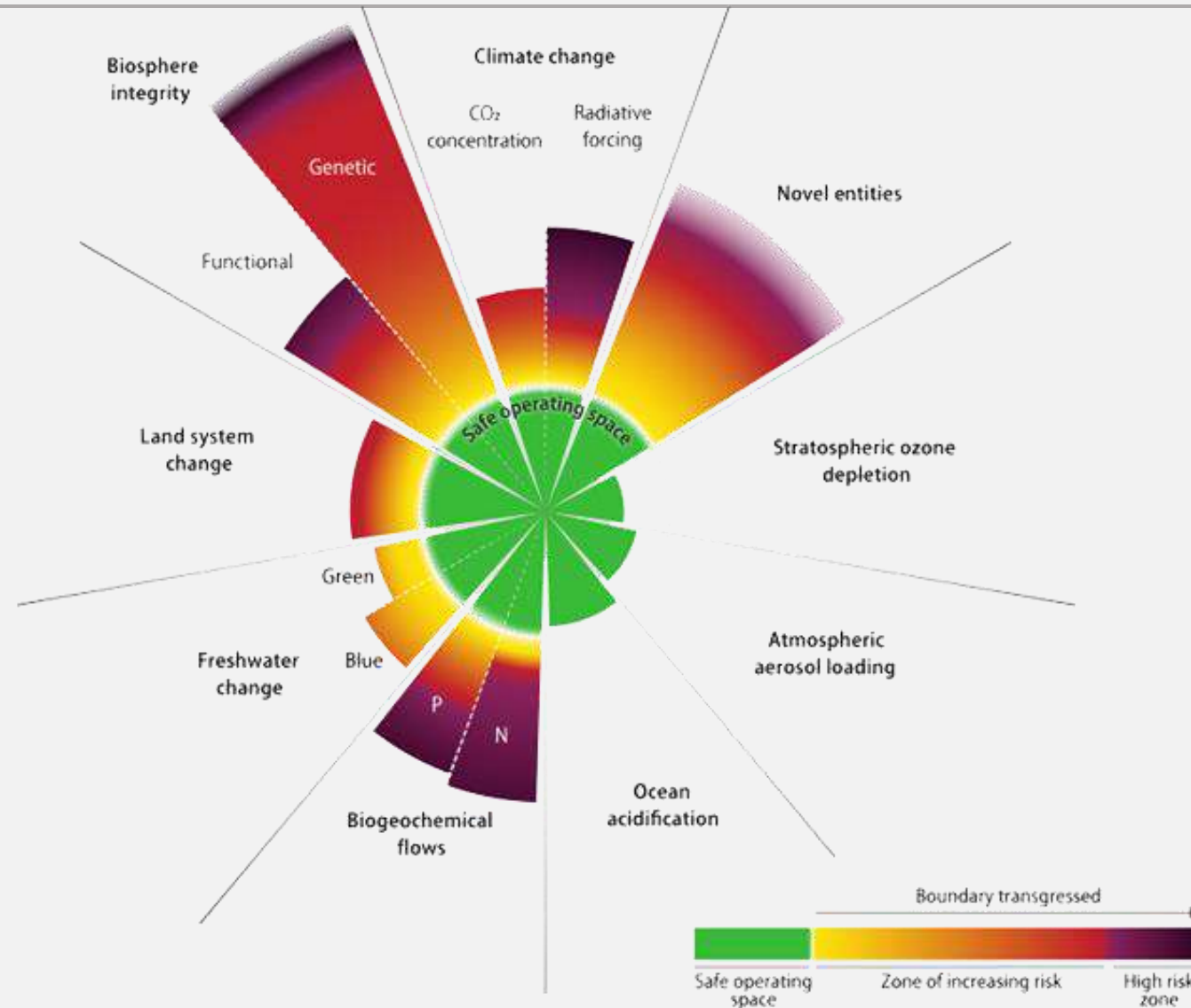
**21<sup>a</sup>** CONFERENCIA  
**INTERNACIONAL**  
SOBRE **PALMA DE ACEITE**

21<sup>st</sup> International Oil Palm Conference

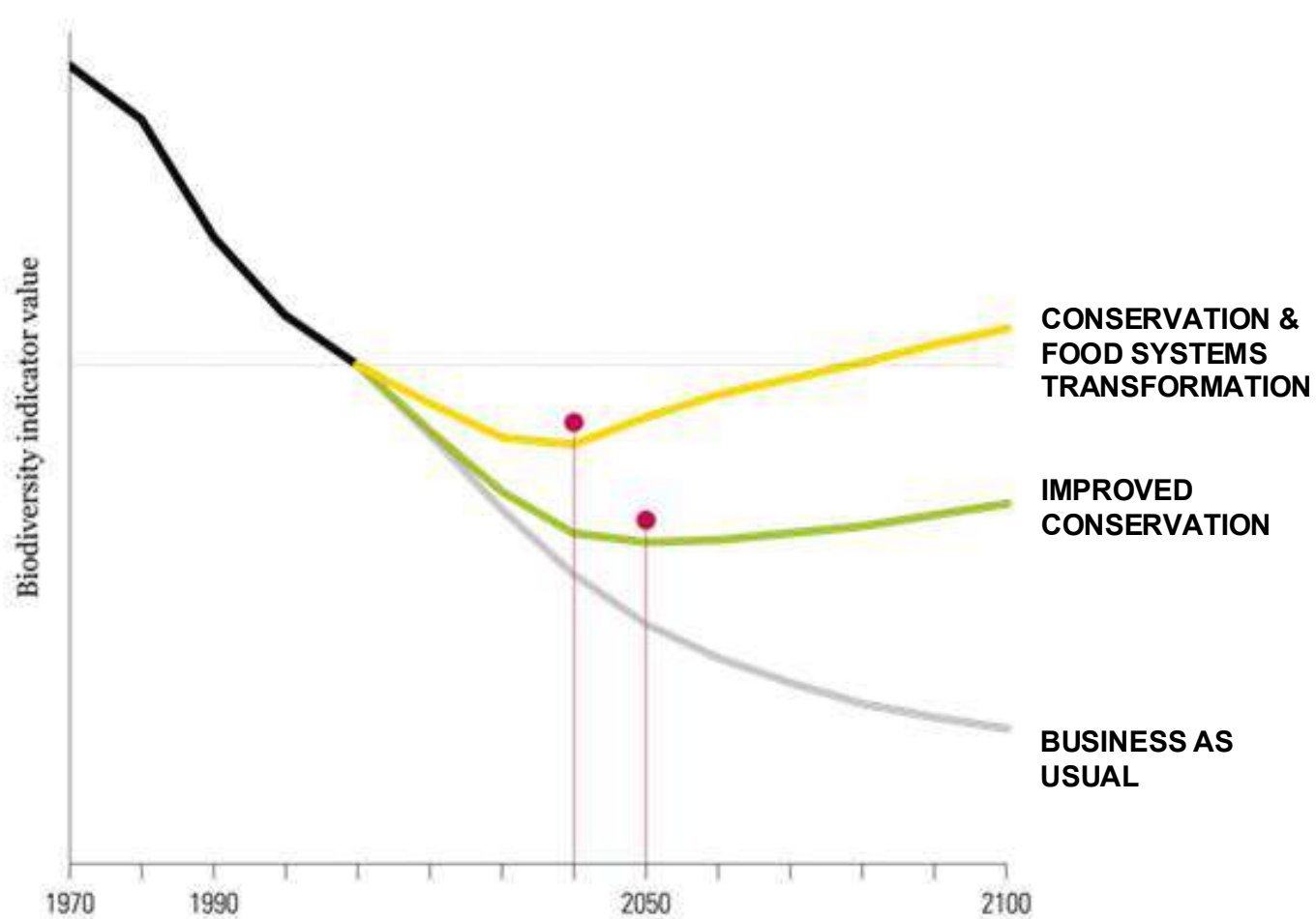
# FOOD SYSTEMS: CHALLENGES, AND OPPORTUNITIES FOR THE PALM OIL AGROINDUSTRY

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WWF International

# WE ARE TRANSGRESSING PLANETARY BOUNDARIES



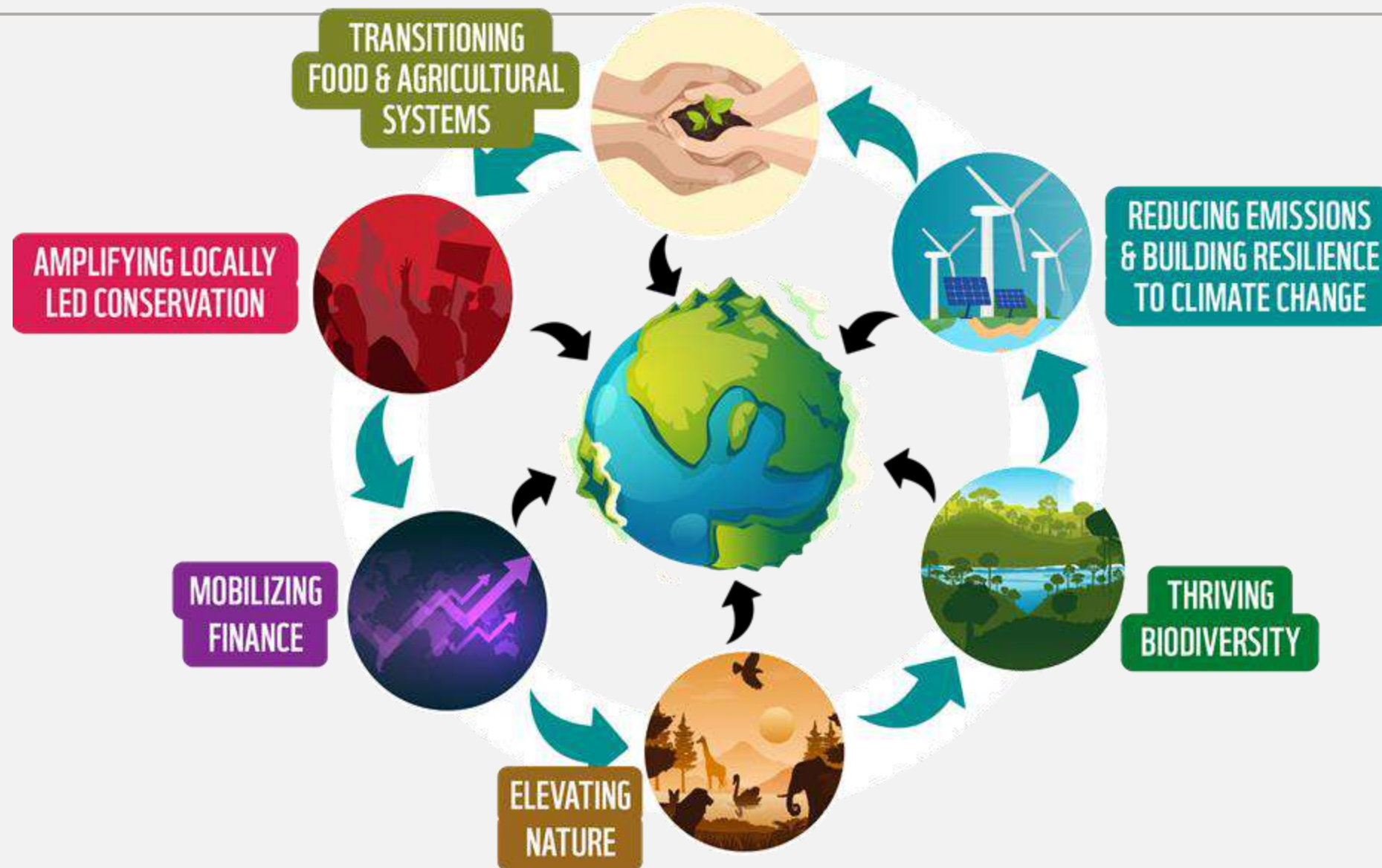
Source: Richardson et. al 2023



# NATURE'S RECOVERY DEPENDS ON FOOD & AGRICULTURAL SYSTEMS TRANSFORMATION



# PART OF A HOLISTIC APPROACH TO CONSERVATION



# FOOD SYSTEMS ARE THE MAIN THREAT TO PEOPLE AND PLANET



Food systems overexploit and inefficiently use natural resources...



**LAND USE**  
**40%**

of inhabitable land is used for food production



**WATER USE**  
**70%**

of freshwater withdrawals are used for food production



**DIVERSITY**  
**75%**

of food comes from 12 crops and 5 animals



**UNEATEN FOOD**  
**40%**

of food produced is lost or wasted



**LIVESTOCK**  
**38%**

of croplands are used to grow feed for livestock

leading to an unhealthy planet...



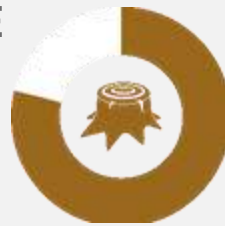
**BIODIVERSITY LOSS**  
**70%**

of terrestrial biodiversity loss is caused by food systems



**CLIMATE CHANGE**  
**30%**

of greenhouse gas emissions are caused by food systems



**NATURE LOSS**  
**80%**

of deforestation is caused by food systems



**BIODIVERSITY LOSS**  
**50%**

of freshwater biodiversity loss is caused by food systems

and unhealthy people.



**FOOD ACCESS**  
**33%**

of people lack regular access to adequate food



**HEALTH**  
**31%**

of people are obese or overweight



**HUNGER**  
**10%**

Of people go hungry

**NET VALUE OF FOOD SYSTEMS**  
**NEGATIVE USD11 TRILLION PER YEAR**

Sources: (1) WWF Living Planet Report 2020, (2) WWF Driven to Waste 2022, (3) FAO State of Food Security and Nutrition 2023, (4) World Obesity Federation 2023, (5) Crippa et. al. 2021 (6) FAO, 1999 (7) Scientific Group of the UN Food Systems Summit.

# THERE ARE SEVERE RISKS FOR FOOD SECURITY



## PRODUCTIVE LAND

**21%**

Since 1960's  
32%  
predicted by  
2040

*UNCCD, Global Land  
Outlook*

## GROWING SEASONS

**20%**

In 12% of  
most  
important  
agricultural  
lands

*ILRI & WWF,  
Rangelands Atlas*

## CROP YIELDS

**10%**

Globally and  
up to 50% in  
some regions

*IPBES, Assessment Report on  
Land Degradation and  
Restoration*

## NUTRITIONAL DENSITY OF CROPS

**-17%**

Less protein,  
zinc and iron  
in crops

*IFPRI, GCAN  
Policy Note*

## FOOD PRICES

**>40%**

SINCE 1960

*FAO, FAO Food Price  
Index*

## GLOBAL POPULATION

**25%**

From 2000-  
2025

*UN, World  
Population Prospects*

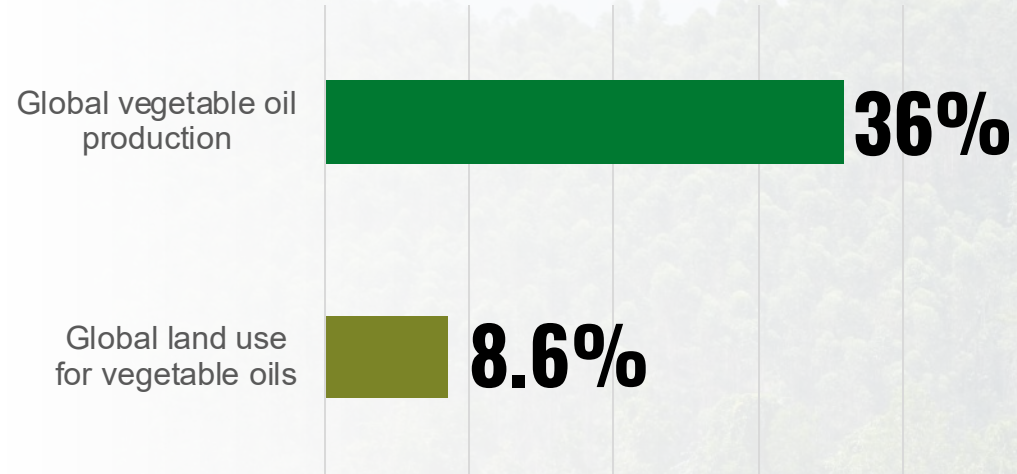




# **THE ROLE OF PALM OIL**



## EFFICIENT LAND USE



**>4x**

average amount of vegetable oil produced per hectare of land versus other crops

*Our World in Data, Palm Oil*

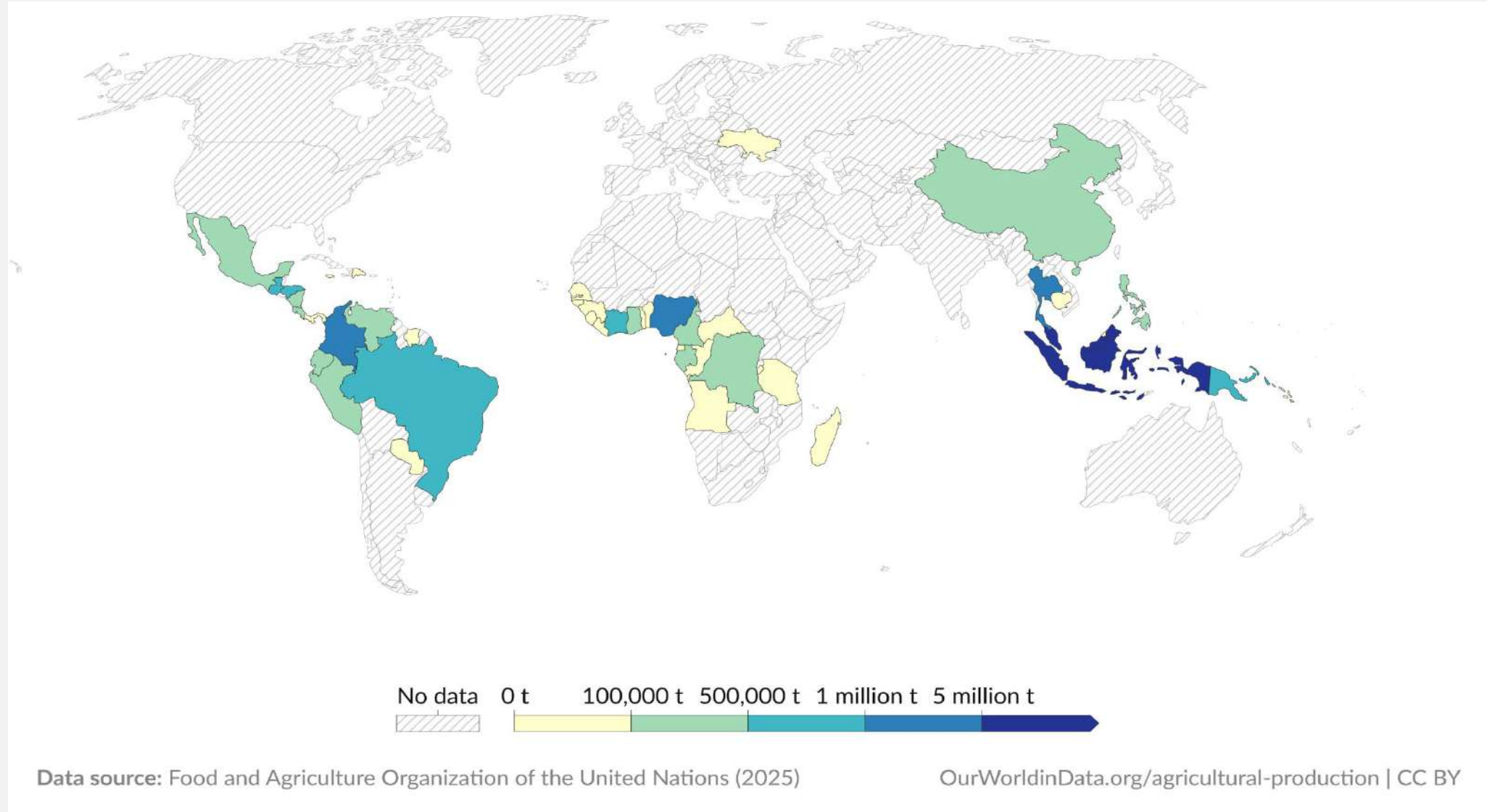
## BUT HIGH CARBON FOOTPRINT



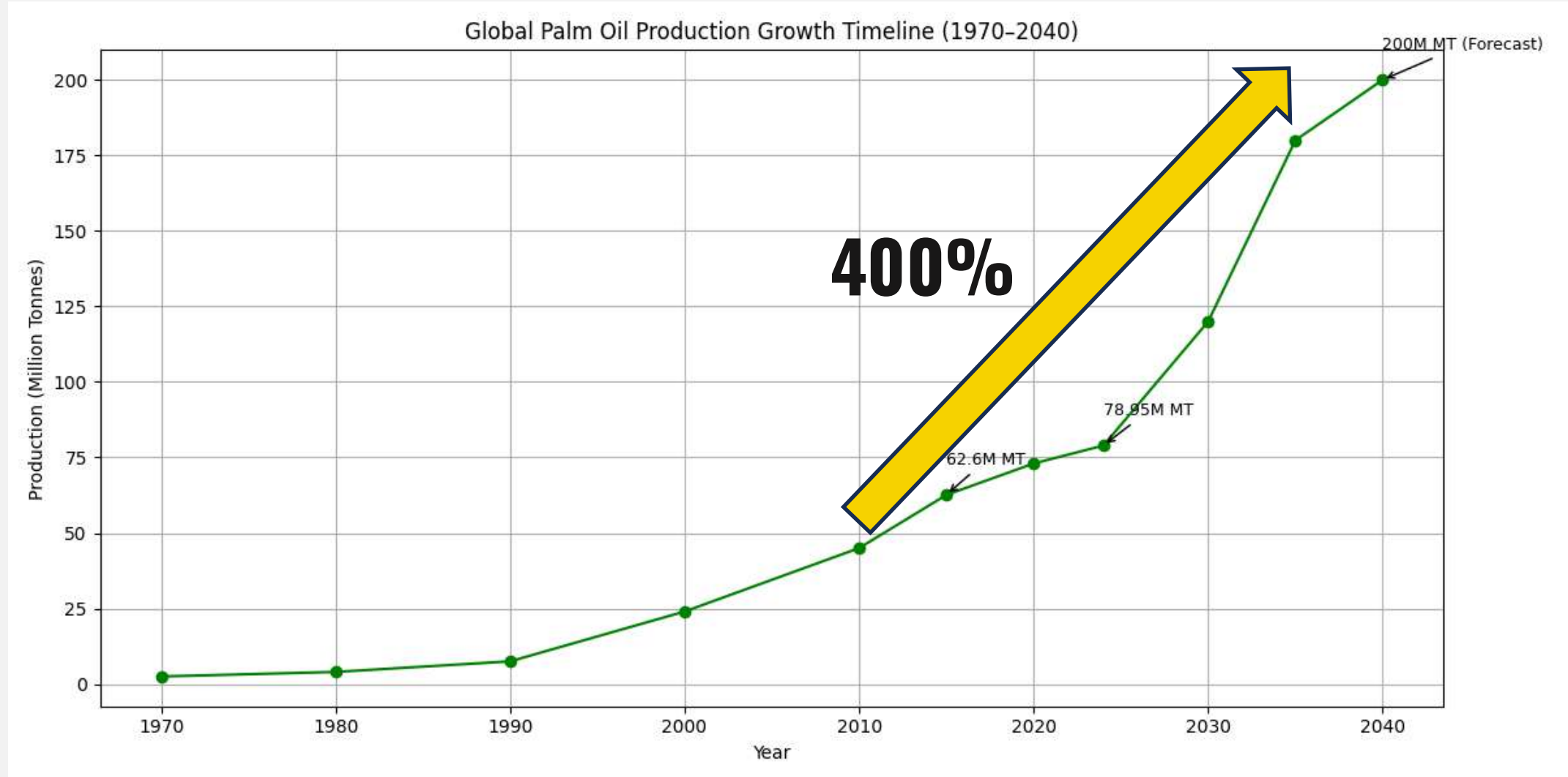
*Efeca, Carbon emission and palm oil*



# OVERLAP WITH KEY CONSERVATION AREAS

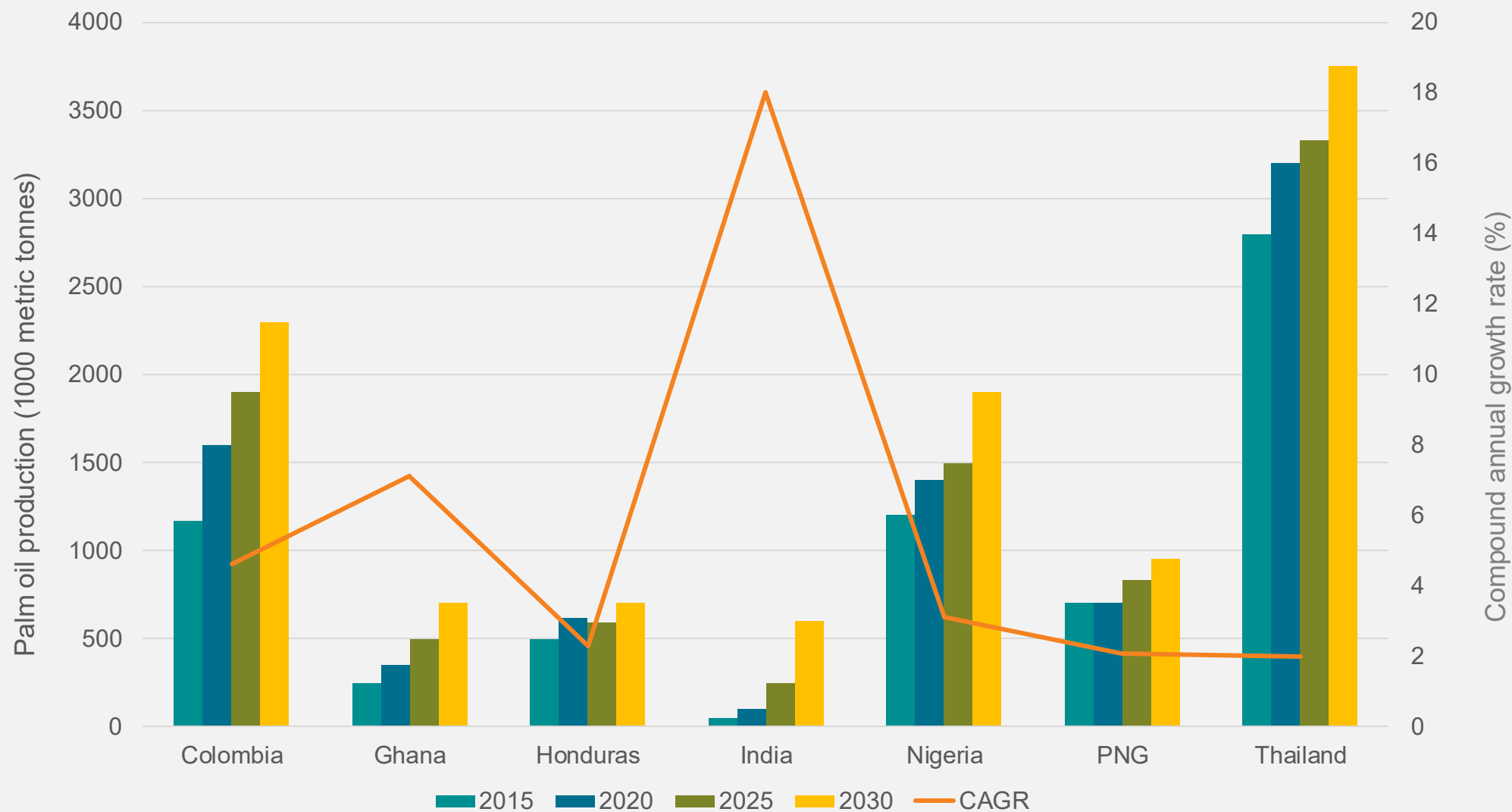


# INCREASED DEMAND INCREASES THREATS





# TROPICAL DEFORESTATION COULD INCREASE

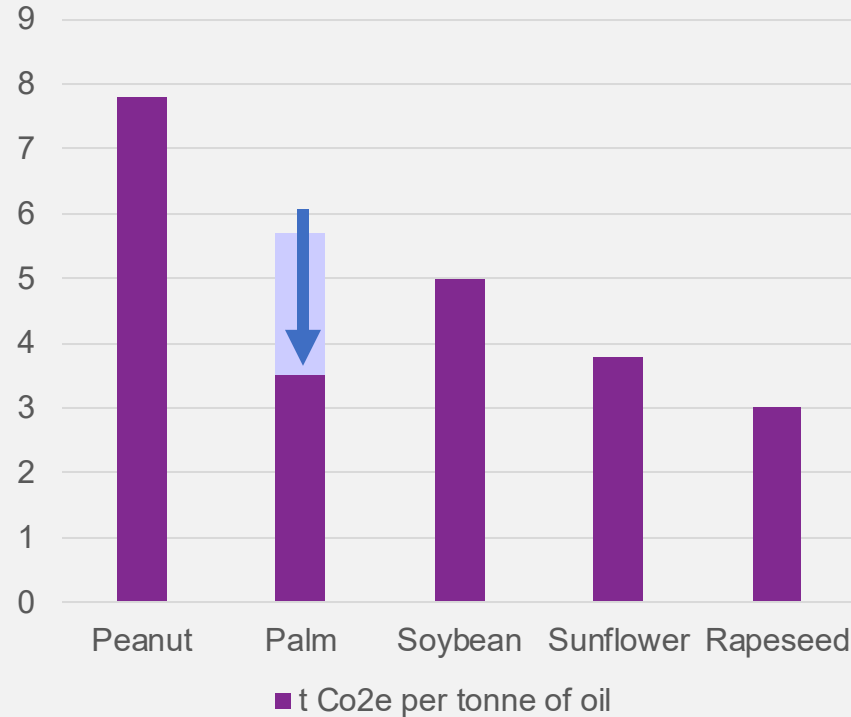




# THE OPPORTUNITY



# SUSTAINABLY CERTIFIED PALM OIL



**35%**

Reduction in greenhouse gas emissions versus conventionally produced palm oil

**466,609 ha**

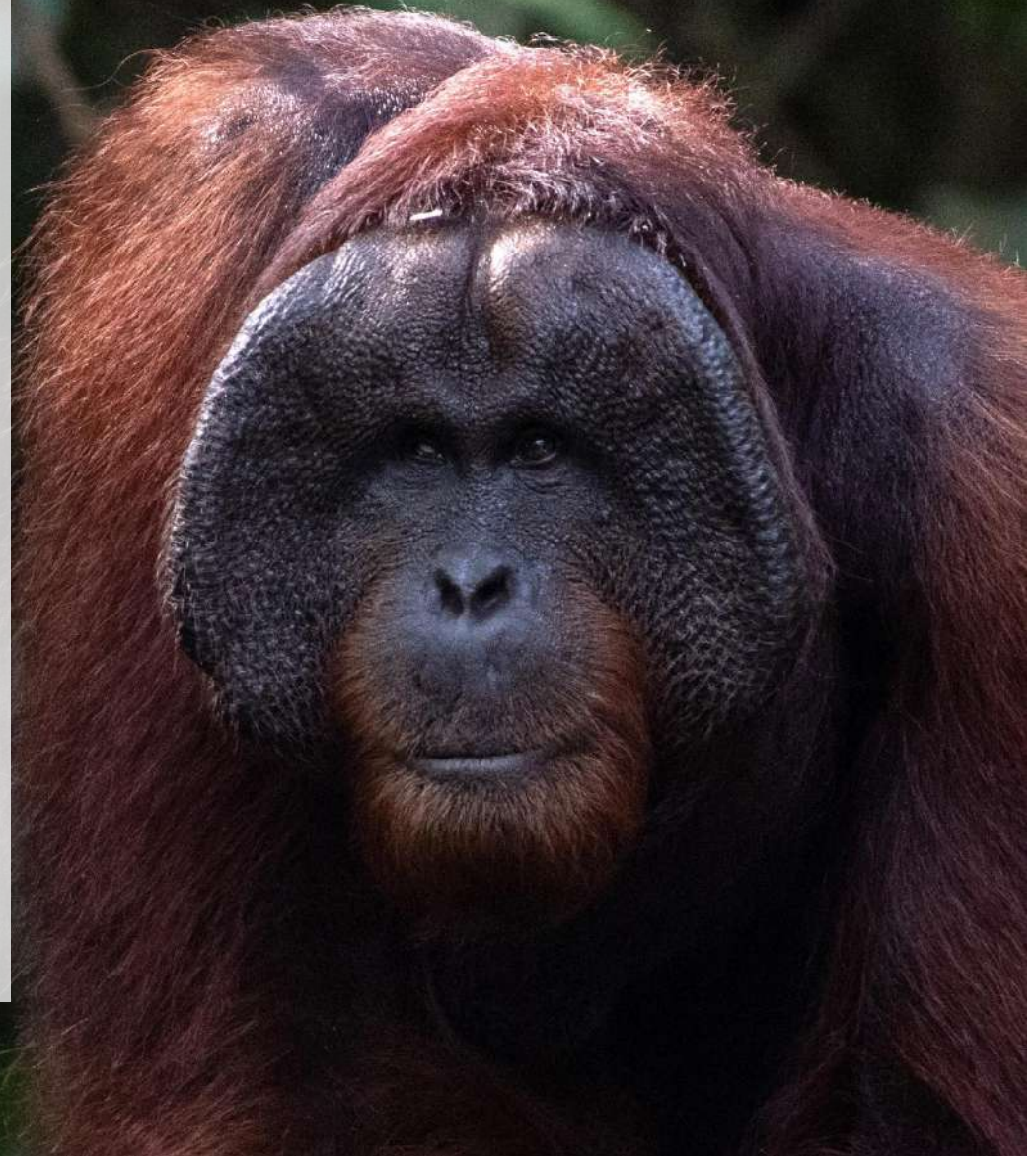
Land conserved

**112,954 ha**

Land rehabilitated

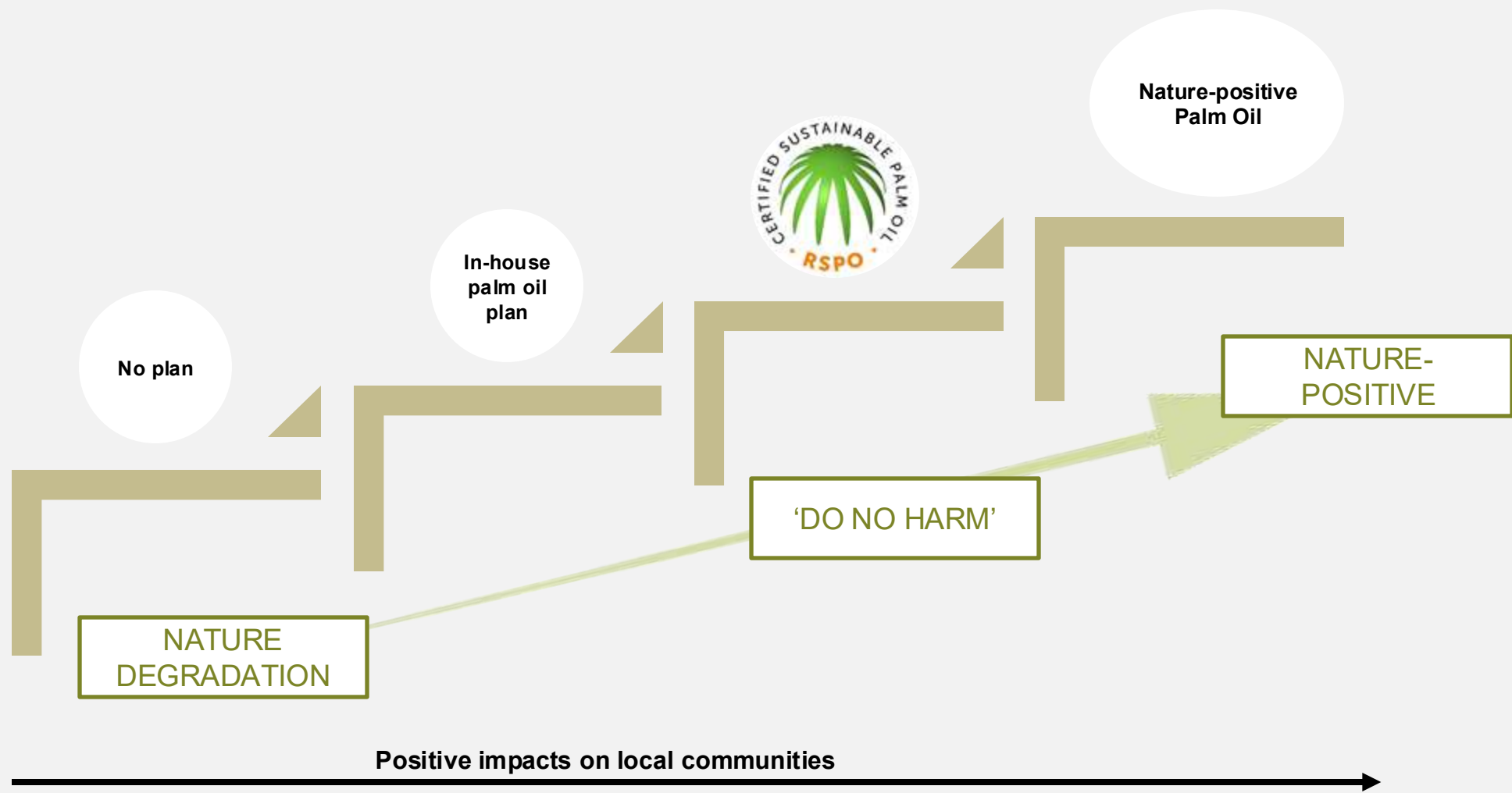
But in 2024 **only 20%** of global palm oil supply was certified sustainable

**THE FOCUS ON ‘DO NOT HARM’  
HELPS TO ADDRESS THE MAIN  
ENVIRONMENTAL AND SOCIAL  
RISKS ASSOCIATED WITH  
PALM OIL PRODUCTION, BUT  
HAS NOT PROVEN TO BE  
SUFFICIENT ENOUGH TO  
MAXIMISE MEASURABLE  
BIODIVERSITY GAINS**





# SHIFT TO REGENERATIVE PALM OIL PRODUCTION



# GOAL

**BY 2030 FOOD AND AGRICULTURAL SYSTEMS ARE IMPROVED THROUGH JUST TRANSITIONS, SECURING NATURE FROM FURTHER CONVERSION, OVERFISHING AND DEGRADATION, WITH NATURE-POSITIVE APPROACHES APPLIED IN 800 MILLION HECTARES OF KEY AREAS.**

## THE FOUR PATHWAYS FOR ACTION (4Ps)

### PLANET

Influence changes in scaling mechanisms to deliver new and ambitious decisions, policies and commitments at global and national levels, so that food and agricultural systems operate within planetary boundaries, avoiding negative tipping points and promoting positive ones.

### PLACES

Deliver action to protect nature from deforestation and conversion for food production, sustainably manage existing food and agricultural production systems and restore degraded ecosystem services and rehabilitate soil function for sustainable food production.

### PEOPLE

All people - particularly Indigenous Peoples, local communities, smallholder farmers, and other underrepresented groups - are meaningfully included in decision-making processes related to food and agriculture, and equitably benefit from their participation.

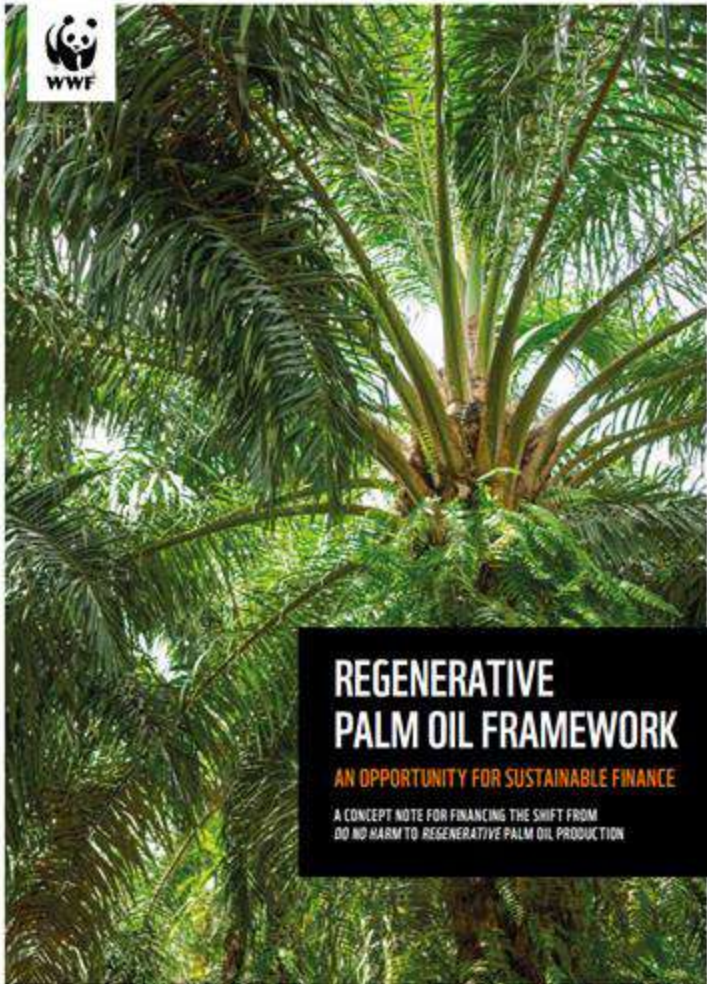
### PROSPERITY

Externalities from food and agricultural systems are quantified to establish an economic narrative and call to action in which nature-positive food and agricultural systems can improve prosperity - resilience, health and livelihoods - of all nations and people.





# WWF'S REGENERATIVE PALM OIL FRAMEWORK



## SIX SOCIAL AND ENVIRONMENTAL PERFORMANCE TARGETS

Maintain crop  
productivity

Ensure social and  
economic  
wellbeing

Enhance biodiversity

Support ecosystem  
services

Strengthen climate  
resilience

Reduce greenhouse  
gas emissions and  
increase carbon  
sequestration



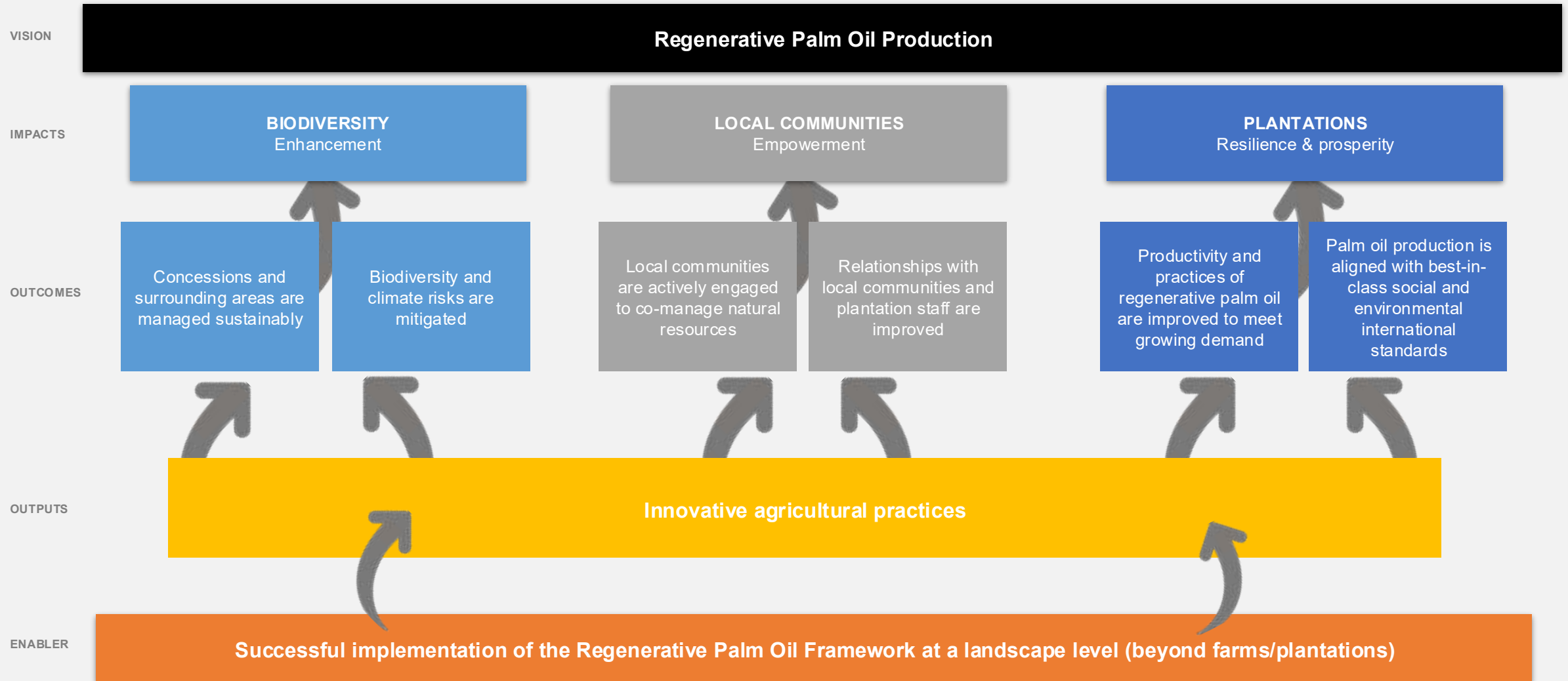
# REGENERATIVE PALM OIL: THE PROPOSED COMMON DEFINITION



**REGENERATIVE PALM OIL PRODUCTION MAINTAINS CROP PROFITABILITY, CONTRIBUTING TO THE SOCIAL AND ECONOMIC WELLBEING OF COMMUNITIES AND WORKERS, AS WELL AS SEEKING TO ENHANCE BIODIVERSITY, ECOSYSTEM SERVICES, CLIMATE RESILIENCE AND CARBON SEQUESTRATION, AS PART OF A LANDSCAPE APPROACH.**



# REGENERATIVE PALM OIL: OUR THEORY OF CHANGE





# TOGETHER IT IS POSSIBLE TO TRANSFORM FOOD & AGRICULTURAL SYSTEMS AND RESTORE NATURE



Working to sustain the natural  
world for people and wildlife

together possible™

[panda.org](https://panda.org)



MUCHAS  
GRACIAS



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21<sup>st</sup> International Oil Palm Conference

2025

