

Peluncuran di Indonesia

Jakarta, 18 May 2026

# EAT-Lancet 2025 Report

## Pola Makan Sehat dan Sistem Pangan Berkelanjutan serta Berkeadilan untuk Indonesia

The EAT-Lancet Commission on  
Healthy Sustainable and Just food systems

### EAT-Lancet Commissioner

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Enhance Global

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WorldFish, Malaysia; CGIAR  
World Food Prize Laureate 2021



# Great Acceleration in Global Food Systems

## The scale of the challenge



**2 billion**

people lack key micronutrients like iron and vitamin A



**155 million**

children are stunted



**52 million**

children are wasted



**2 billion**

adults are overweight or obese



**41 million**

children are overweight



**88%**

of countries face a serious burden of either two or three forms of malnutrition



And the world is off track to meet all global nutrition targets

## Environmental impact of food production



Nitrogen and phosphorous pollution



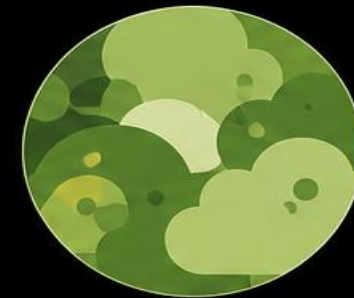
Ecosystem and biodiversity loss



Freshwater depletion

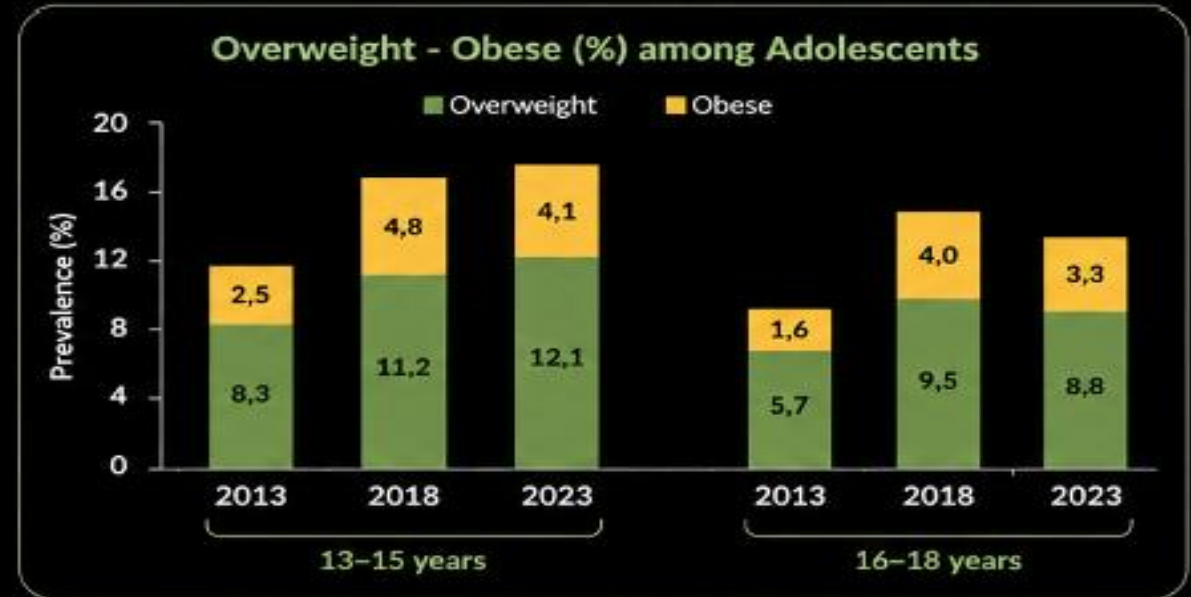
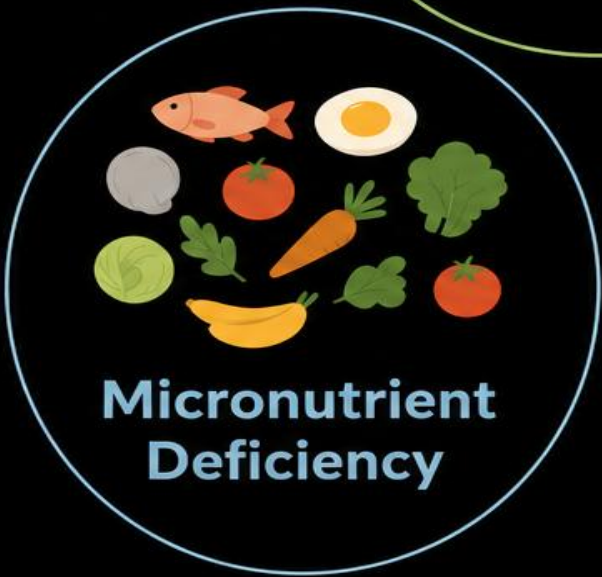
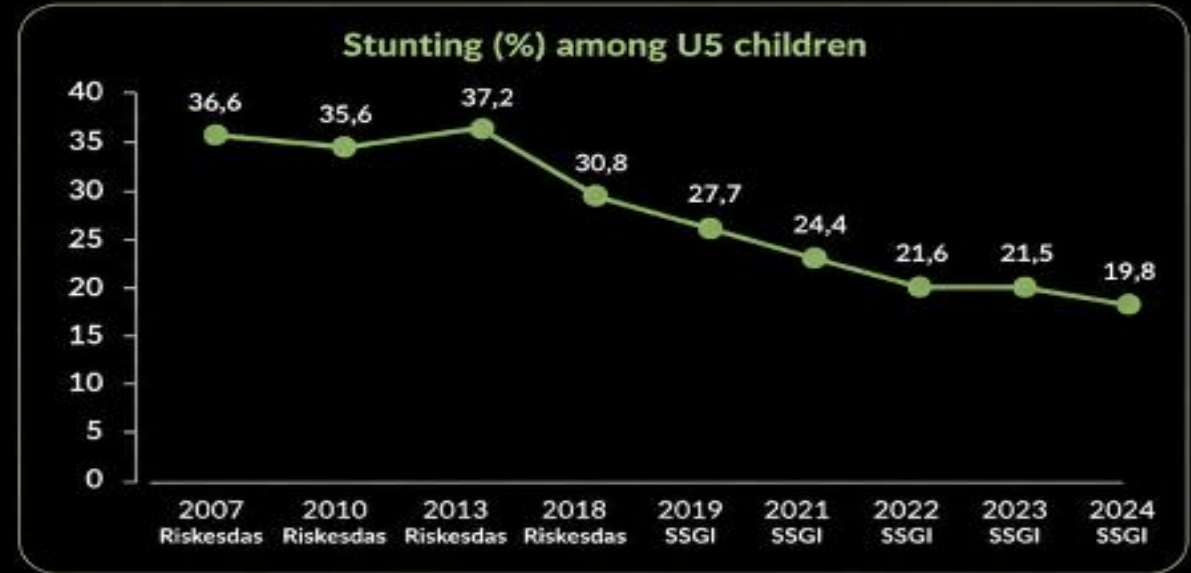


Cropland use



Greenhouse gas emission

# Nutrition Challenge in Indonesia: Triple Burden of Malnutrition

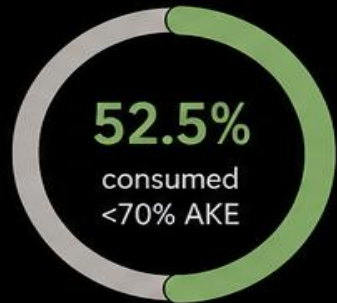


# Indonesia: Diet Quality Remains Inadequate

All Ages (0->55 years) and Adolescents Aged 13-18 years

## Diet adequacy

SKMI 2014



High inadequacy  
among major  
age groups

## Calorie & protein inadequacy

SKMI 2014 (MoH summary)



43.5%

consumed <70%  
of energy  
requirement (AKE)



57.4%

consumed <80%  
of protein  
requirement (AKP)



High energy and  
protein inadequacy  
among adolescents

## Fruit and vegetables

SKMI 2014 (MoH summary)



13–18 years: 45.8 gr  
All: 57.1 gr



13–18 years: 25.2 gr  
All: 33.5 gr



4.6% met the  
recommended intake  
( $\geq$  400g FV/day)

## Sodium excess

All ages

Risikesdas 2018



52.7%

of the population  
consumed  
>2000 mg sodium/day

Among ages 13–18 years

25.9%  
(SKMI, 2014)



High salt intake  
among all age groups  
and adolescents

## Changing eating patterns

Ages 13–18 years

Risikesdas 2018 (MoH summary)



Factory-made  
snacks

73.6%



Fried foods

68.1%



Crackers

61.4%



Processed /  
packaged foods

54.7%



Processed, salty, fried  
and packaged foods  
are increasingly common

AKE: Angka Kecukupan Energy (Energy Adequacy Requirement)

AKP: Angka Kecukupan Protein (Protein Adequacy Requirement)

Risikesdas 2018; SKI 2023; SKMI 2014

Rina Agustina 2026



FACULTY OF



# HOW TO FEED THE FUTURE 10 BILLION PEOPLE

A HEALTHY AND  
SUSTAINABLE DIET  
WITHIN PLANETARY  
BOUNDARIES?



Source: Willett et al., EAT-LANCET Commission (2019)

## 2019 EAT-Lancet Commission on healthy diets and sustainable food systems

# THE LANCET

January, 2019

www.thelancet.com

## Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems



"Food in the Anthropocene represents one of the greatest health and environmental challenges of the 21st century."

A Commission by *The Lancet*

## 2025 EAT-Lancet Commission on healthy, sustainable, and just food systems

# THE LANCET

October, 2025

www.thelancet.com

## The EAT-Lancet Commission on healthy, sustainable, and just food systems



"The targets of the EAT-Lancet Commission for healthy people on a healthy planet with just food systems can only be met through concerted global action and unprecedented levels of transformative change."

A Commission by *The Lancet*

# Healthy Diets ✦



Healthy food ✦  
accessible to all — produced,  
processed, distributed,  
and consumed fairly  
within planetary 🔄  
boundaries 🌸



# Methods

## The four layers

Randomised Trials

Associations with Disease

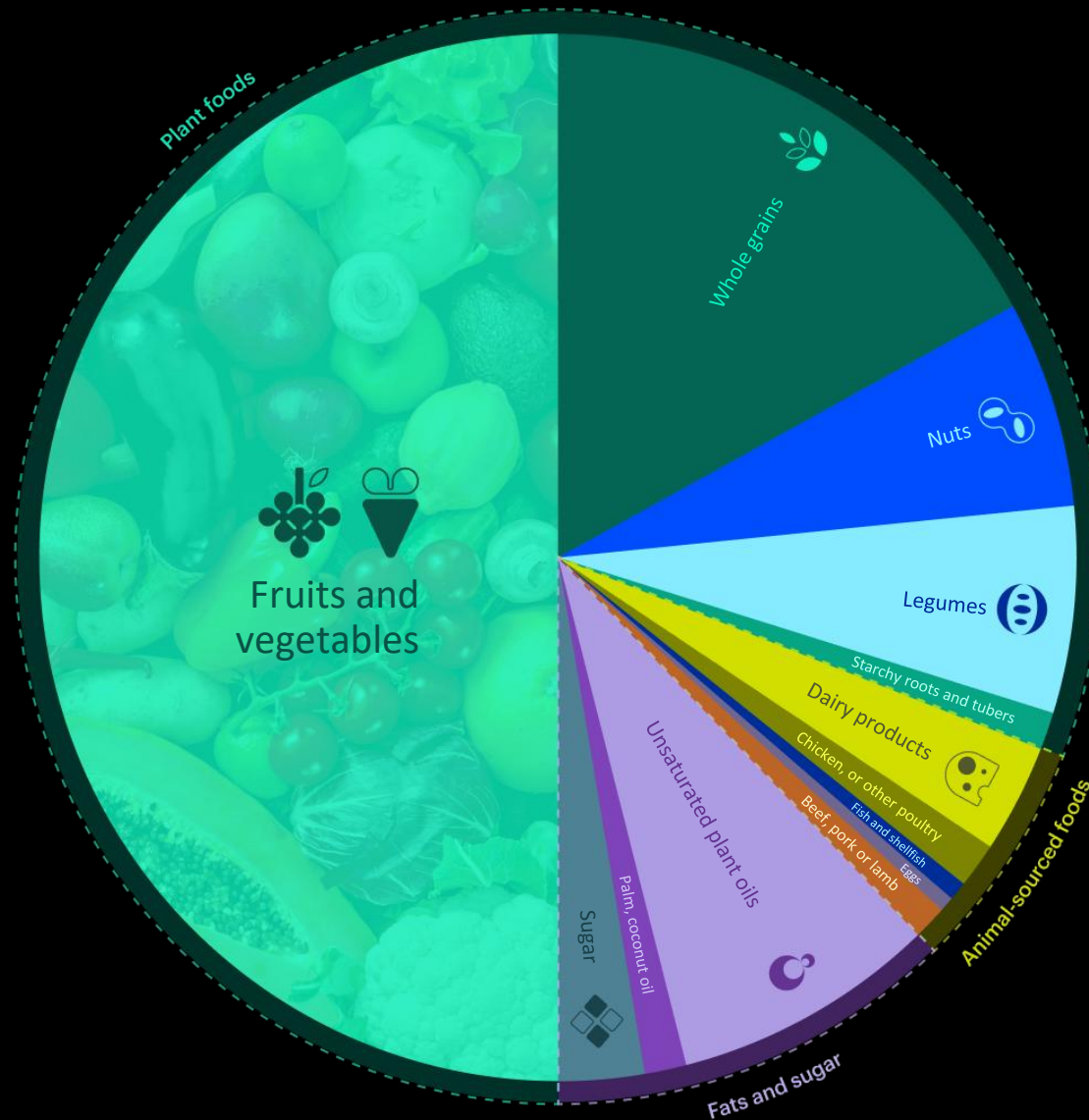
Effects on Risk Factors

Composition of Food



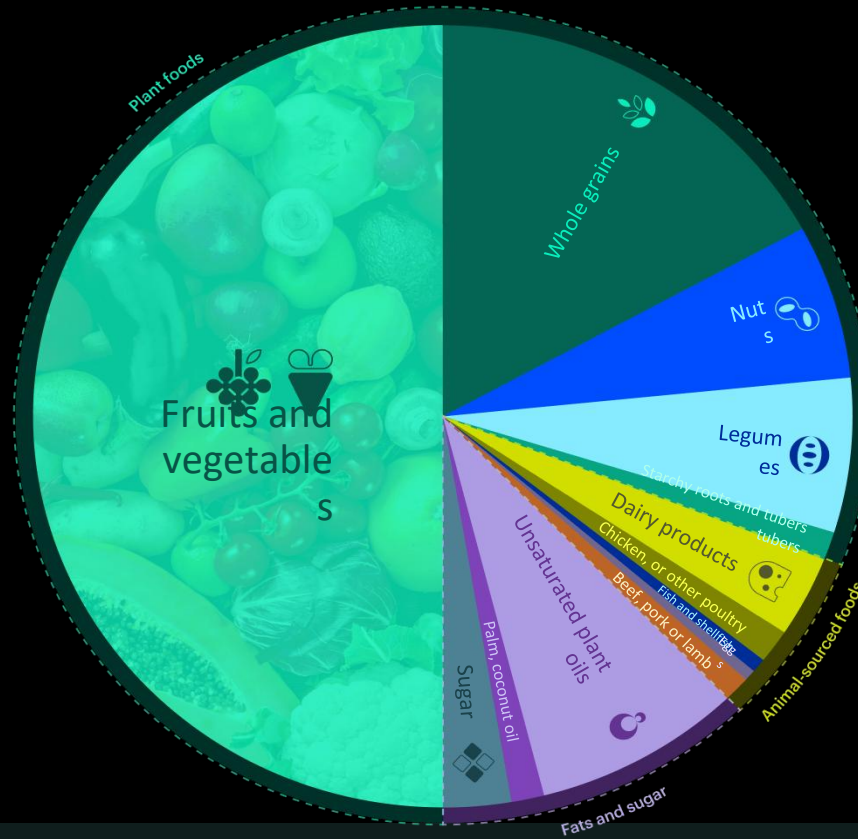
# Planetary Health Diet

A flexible diet for better human health



Plant foods		Grams/day (range)
	Vegetables	300 (200–600)
	Fruits	200 (100–300)
	Whole grains	210
	Tree nuts and peanuts	50 (0–75)
	Legumes	75 (0–150)
	Starchy roots and tubers	50 (0–100)
Animal-sourced foods		Grams/day (range)
	Dairy products	250 (0–500)
	Chicken, or other poultry	30 (0–60)
	Beef, pork or lamb	15 (0–30)
	Fish and shellfish	30 (0–100)
	Eggs	15 (0–25)
Fats, sugar, and salt		Grams/day (range)
	Unsaturated plant oils	40 (20–80)
	Sugar (added or free)	30 (0–30)
	Palm, coconut oil	6 (0–8)
	Lard, tallow, butter	5 (0–10)
	Sodium (mg)	<2000

# Planetary Health Diet



**Vegetables & fruits**  
5+ SERVINGS PER DAY



**Nuts**  
1-2 SERVINGS PER DAY



**Legumes**  
2-3 SERVINGS PER DAY



**Poultry**  
2 SERVINGS PER WEEK



**Red meat**  
1 HAMBURGER PER WEEK



**Eggs**  
2 EGGS PER WEEK

# Key nutrients, without excess

More of what we need: fibre, folate,  
and potassium.

Less of what we do not need:  
saturated fat and added sugar.

Note: Some nutrients (e.g. B12, iron,  
calcium) remain best sourced from  
animal-sourced foods.

B<sub>12</sub>

Vitamin B12

Ensure adequate intake through supplementation, fortified foods, or modest amounts of animal-source foods, especially for individuals at higher risk.



Iodine

Especially critical in low-salt diets and vegetarian/ seaweed-based dietary patterns.  
Ensure iodized salt and/or seaweed intake.



Iron & Zinc

Prioritize dietary diversity with legumes, whole grains, nuts, seeds, fruits, and vegetables.  
Use fortified foods or modest animal-source foods for groups at risk.



Sodium

Limit sodium from processed foods and added salt.  
Prioritize unprocessed and minimally processed foods to support both health and sustainability.

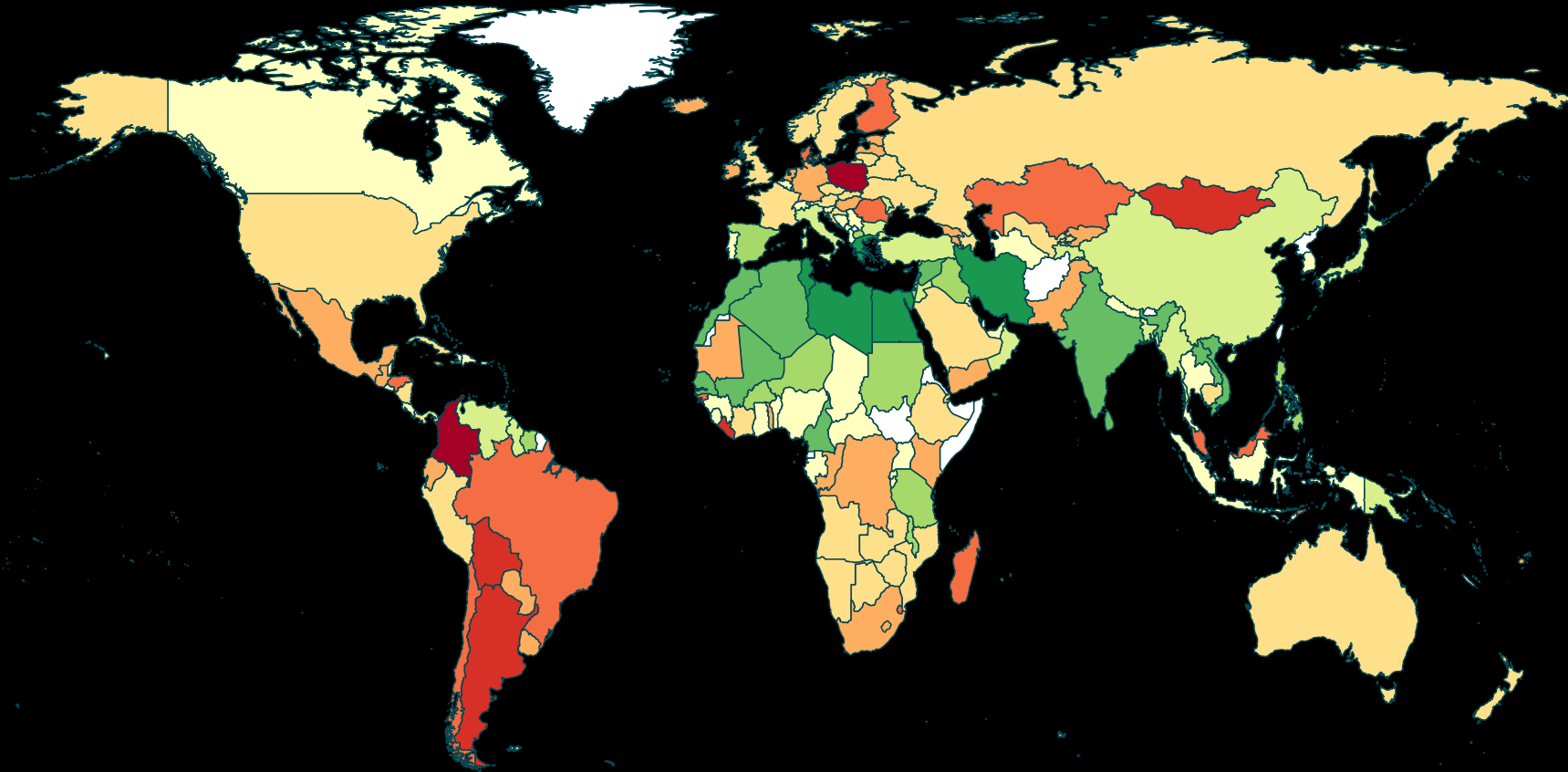


These safeguards help ensure that the Planetary Health Diet is nutritionally adequate, culturally adaptable, and achievable for all.

# PHDI scores for 171 countries

## The Planetary Health Diet Index

### Every step reduces risks



▼ -27%

premature  
deaths

in adults with adoption of the  
the PHD

▼ -15 million

premature  
deaths/year

in adults with adoption of the  
the PHD

Planetary Health Diet Index



Rockström, J. et al. 2025. The EAT-Lancet Commission on healthy, sustainable, and just food systems.

Rina Agustina 2026



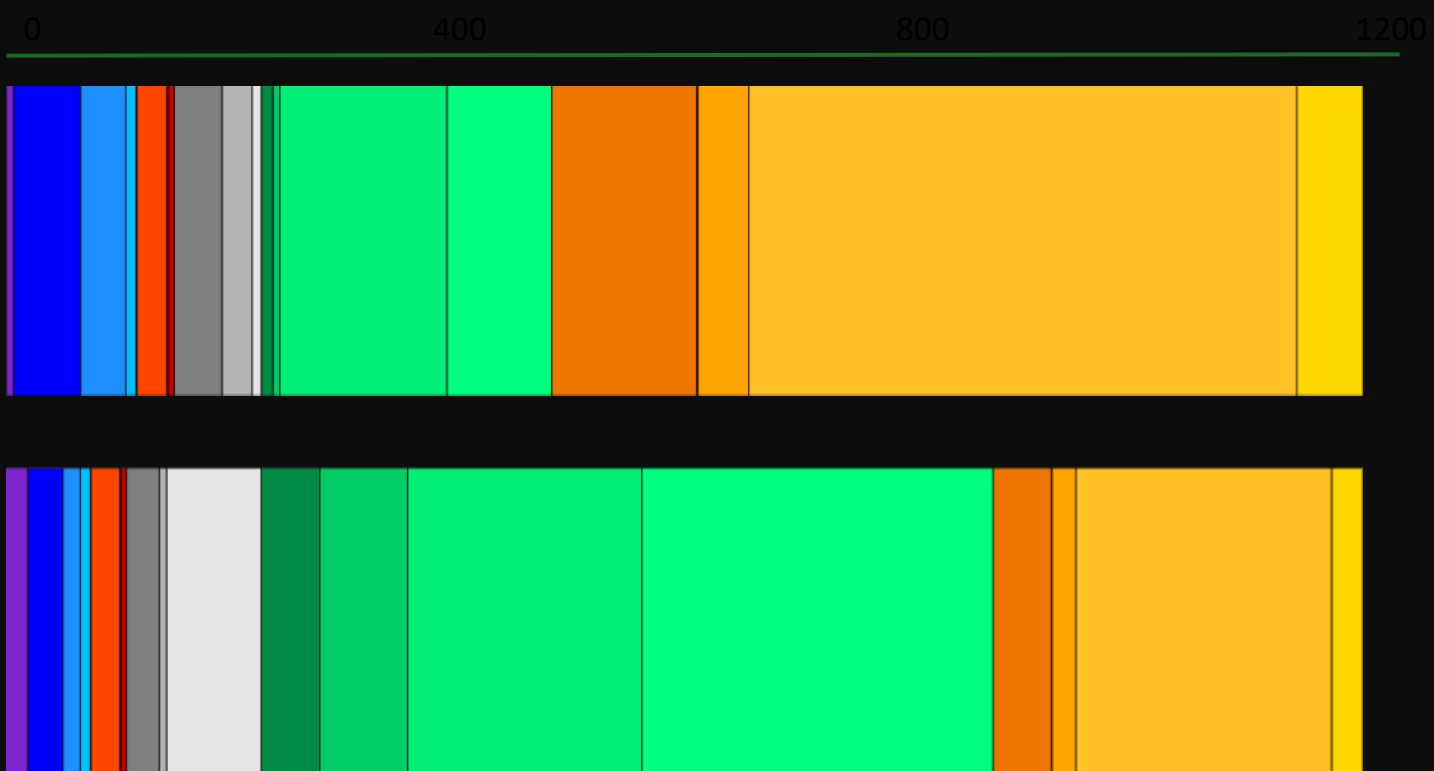
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# Country diet comparison (Adults)

## Indonesia outlook



Absolute food intake (grams / day)



Average Indonesian diet

Indonesian PHD diet

**Legend**

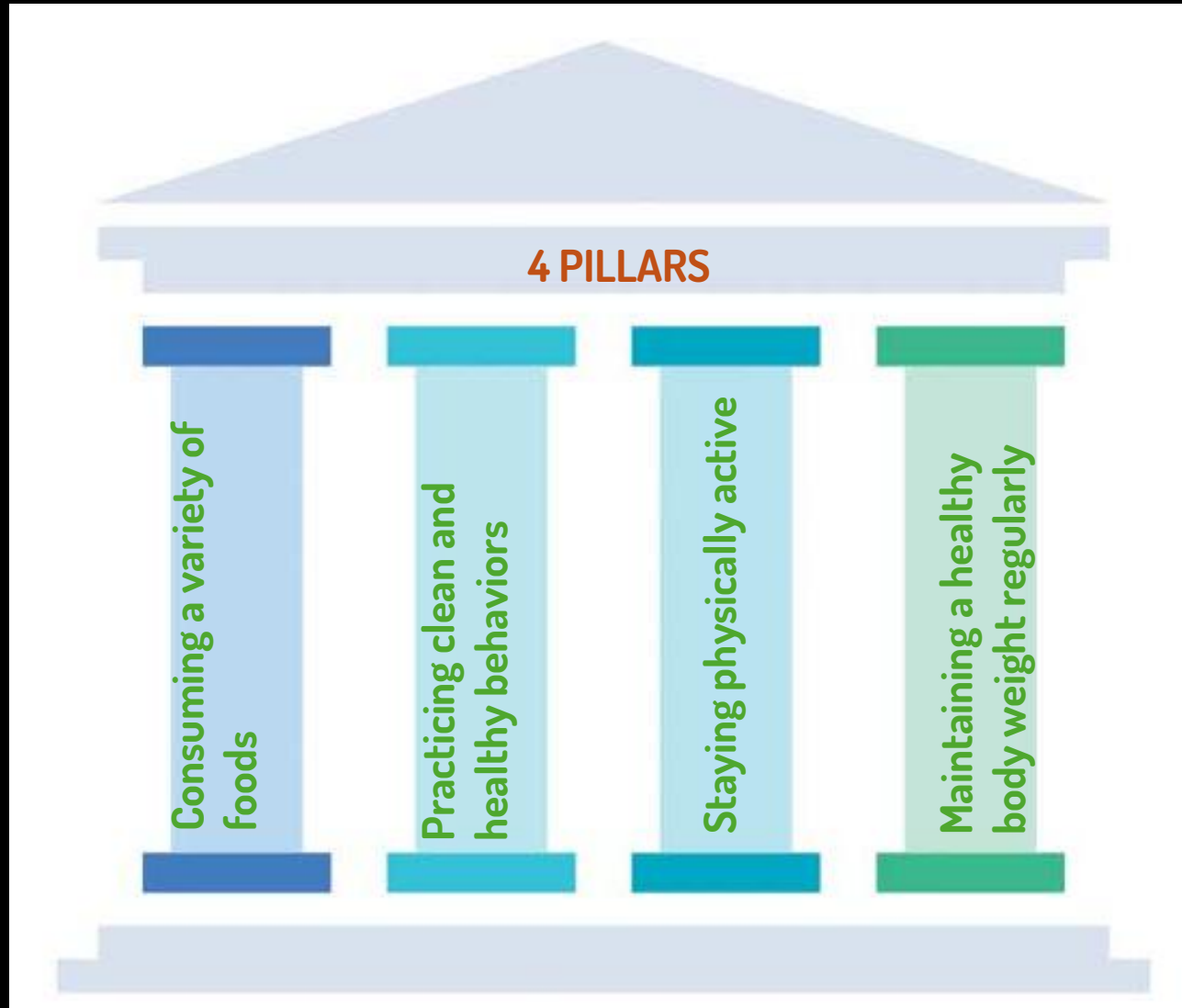
- wheat
- rice
- maize
- other grains
- roots
- vegetables
- fruits
- legumes
- nuts&seeds
- veg oils
- sat-fat oils
- sugar
- beef&lamb
- pork
- poultry
- animal fats
- milk
- eggs
- fish
- other

Other = stimulants, spices, alcohol, other





# Innesia National Nutrition Guidelines 2014



**Tumpeng Gizi Seimbang**  
PANDUAN KONSUMSI SEHARI-HARI

**Batasi, gula, garam dan minyak**

- MINYAK
- GULA
- GARAM

**2 - 4 PORSI**

**3 - 4 PORSI**

**2 - 3 PORSI**

**3 - 4 PORSI**

TEPUNG  
SAGU

**+ Minum air putih 8 gelas**

Mencuci tangan

Bermain sepak bola

Berjalan

Senam

Bersepeda

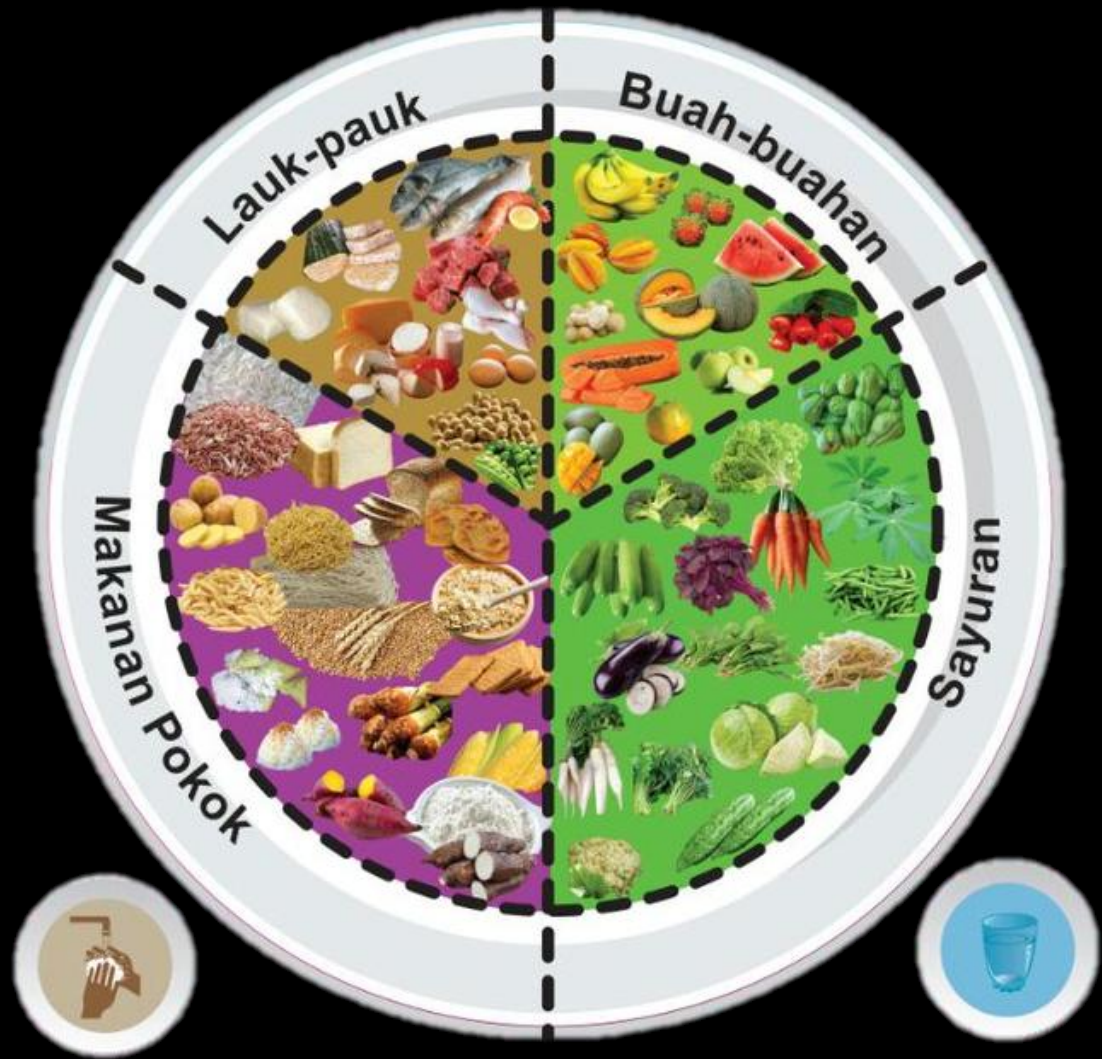
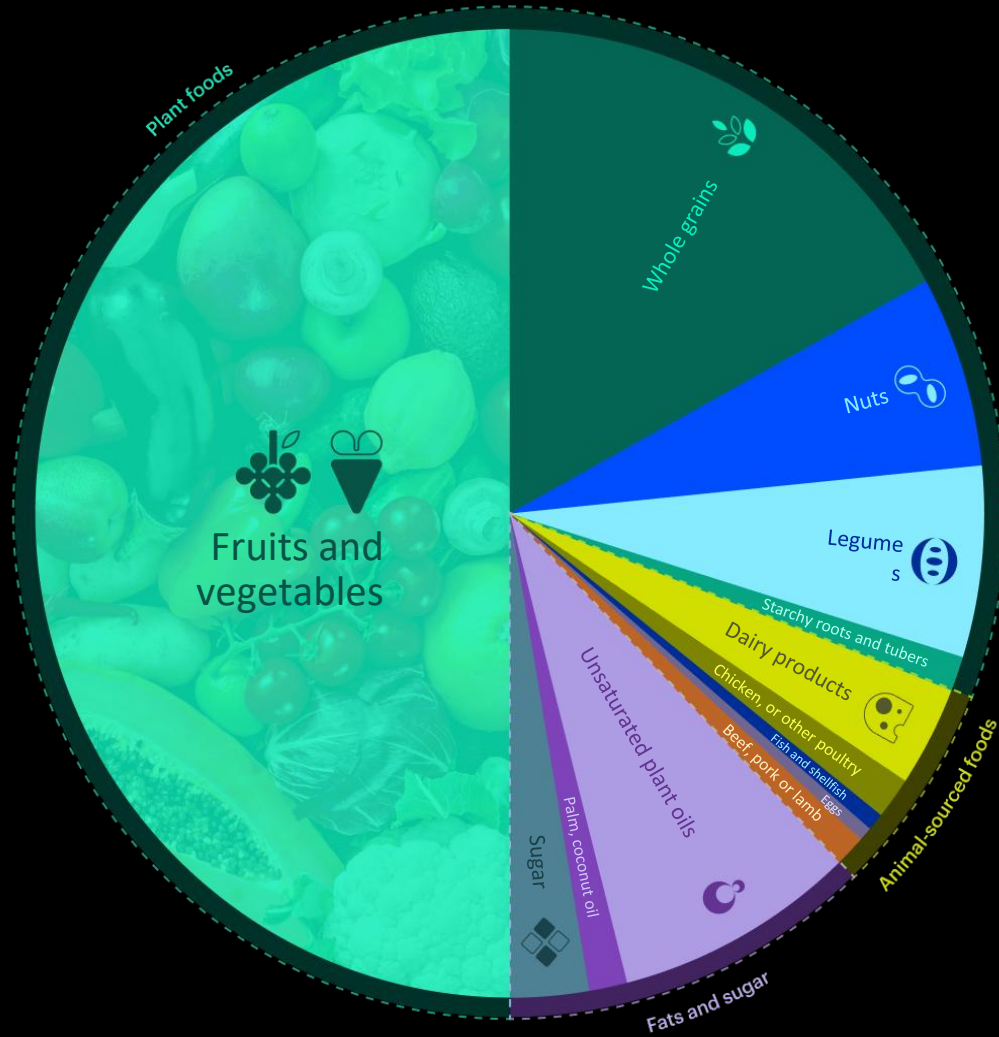
Menyapu

Memantau berat badan

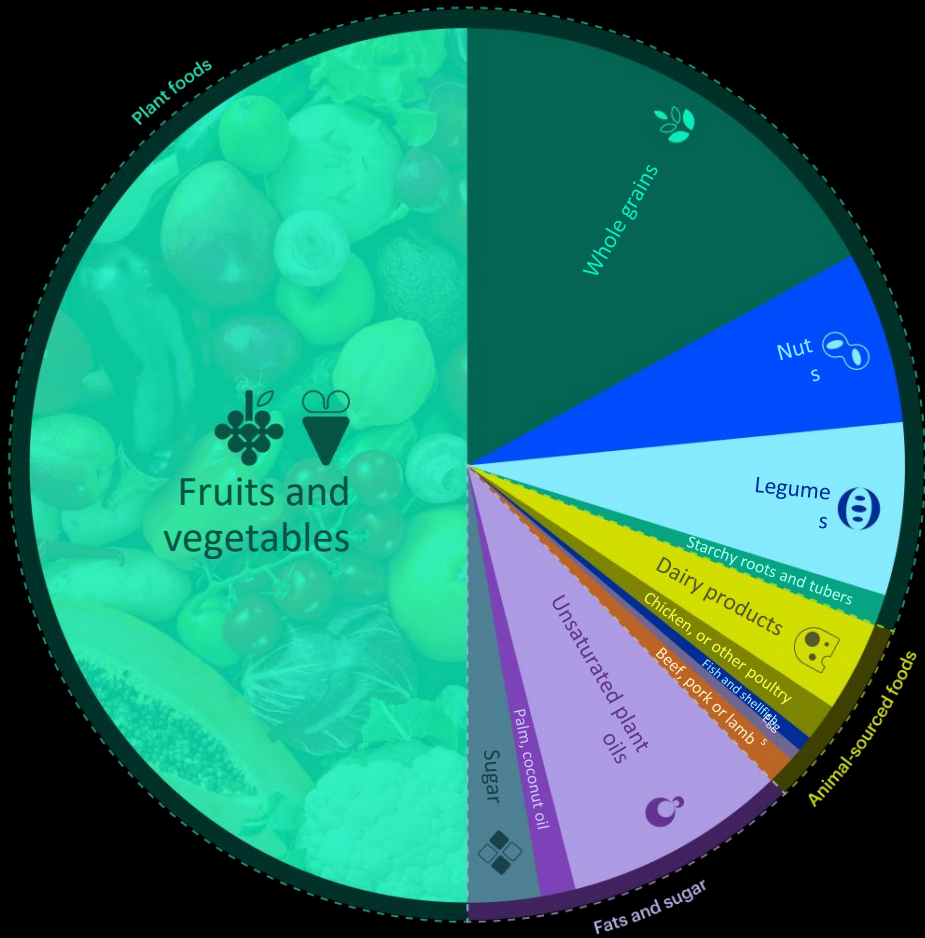
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# PLANETARY HEALTHY DIETS

# ISI PIRINGKU

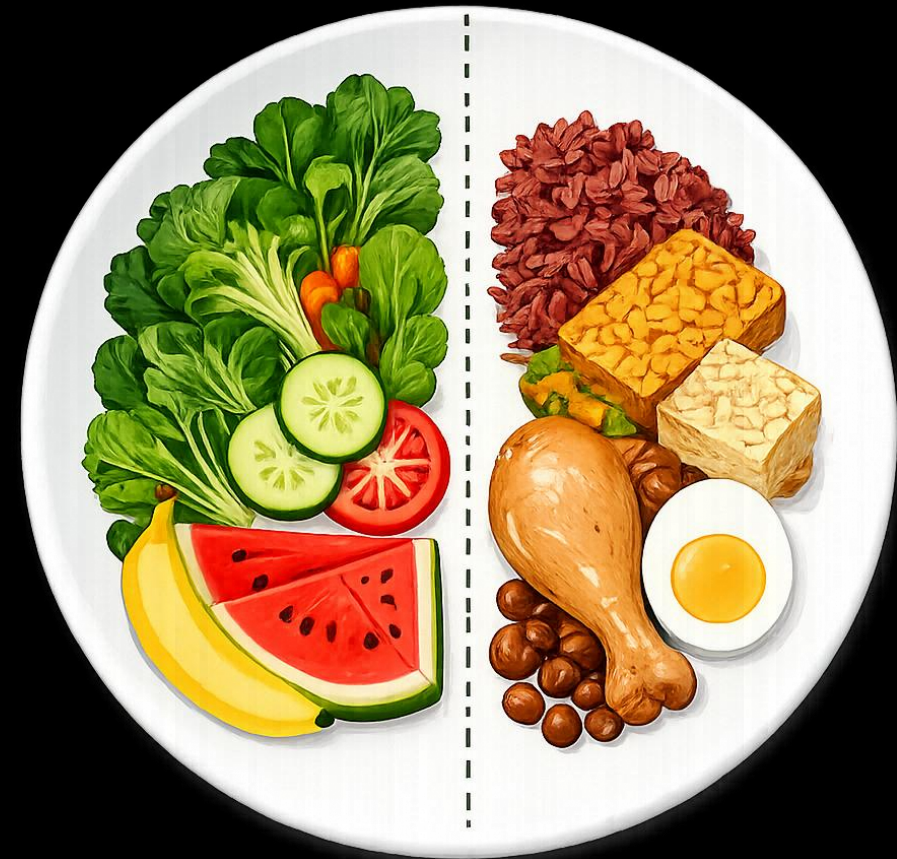


# PLANETARY HEALTHY DIETS



$\frac{1}{2}$   
Vegetables  
and fruit

# ISI PIRINGKU



$\frac{1}{2}$   
Staples and  
side dishes/  
protein

# Translation of the PhD to Indonesia National Dietary Guidelines



Describe current Indonesian Food Intake



Compare actual intake with National Nutrition Guidelines (NNG) and Planetary Healthy Diet (PHD)



Proposed modifications to NNG toward PHD alignment



Develop culturally and convenience-appropriately menu planning



Assess nutritional adequacy and affordability

# Data Sources and Sample Size



**Indonesia National Total Diet Survey (NTDS) 2014**  
107,167 adults ( $\geq 19$  years)  
Nationally representative



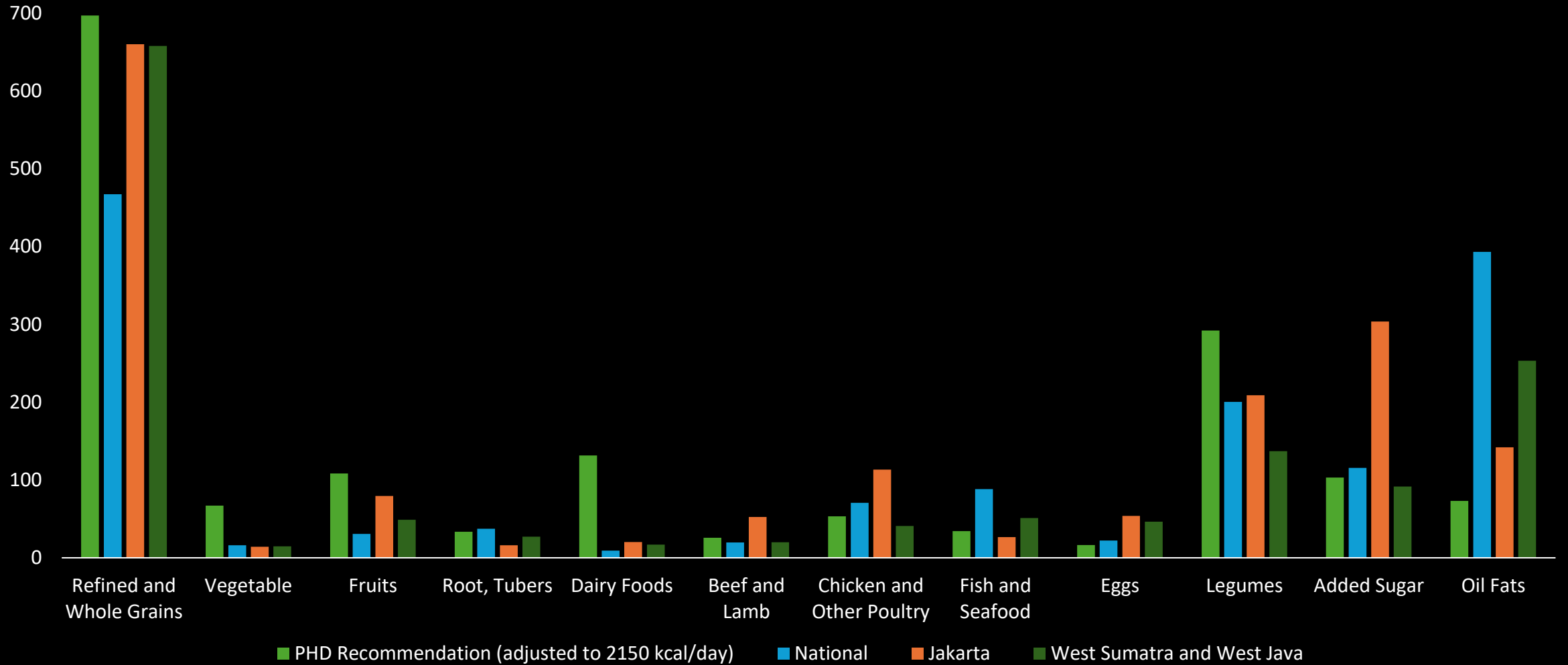
**Minang-Sunda Survey (2021)**  
West Sumatera and West Java  
360 respondents (35-65 years)  
Regional Rural Representative



**Jakarta Survey (2023)**  
Capital Country  
202 respondents (19-64 years)  
Urban Representative

# Comparison of Planetary Health Diets (PHD) Recommendation and the Actual Intake in Indonesia (Adjusted to 2150 kcal/person/day)

kcal/person/day



# *Reorienting Indonesian Diets:* Balancing Global Benchmarks with Indonesian Food Culture and Realities

Food Group	Adjustment
 Refined rice, sugar	↓ Reduce and shift to whole grain
 Palm oil, saturated fat	↓ Reduce (below PHD)
 Whole grains	↑ Increase substantially
 Vegetables & fruits	↑ Increase substantially
 Eggs	↔ Maintain
 Legumes	↔ Maintain / Slight ↑
 Dairy	↔ Maintain
 Beef & lamb	↔ Modest (within PHD)
 Chicken & poultry	↔ Maintain
 Fish & seafood	↔ Maintain (higher than PHD, aligned with NNG)
 Roots & tubers	↔ Slightly ↑ (cultural relevance)

# Menu Day 1



Day	Meal
Breakfast	Madura Corn Rice, Urap Sayur, Balado Tenggiri, Tempeh Orek;
Snack	Mango Pudding, Full Cream Milk, Avocado and Honey;
Lunch	Red Rice, Pepes Ikan, Tofu and Tempeh Bacem, Cah Kangkung;
Snack	Bean Curd Spring Rolls;
Dinner	Kimlo Soup and Fruit.



# Menu Day 2



Day	Meal
 Breakfast	Manado Porridge;
 Snack	Boiled Sweet Potato and Pineapple;
 Lunch	Gado – Gado
 Snack	Fruit Juice and Roasted Almond;
 Dinner	Red Rice, Silver Catfish Soup with Yellow Sauce, Cap Chay



# Family Menu for Indonesia

**PHD-Like Food Model Delicious  
Indonesian Cuisine Lunch for 4  
People**

Red Rice

Pepes Ikan

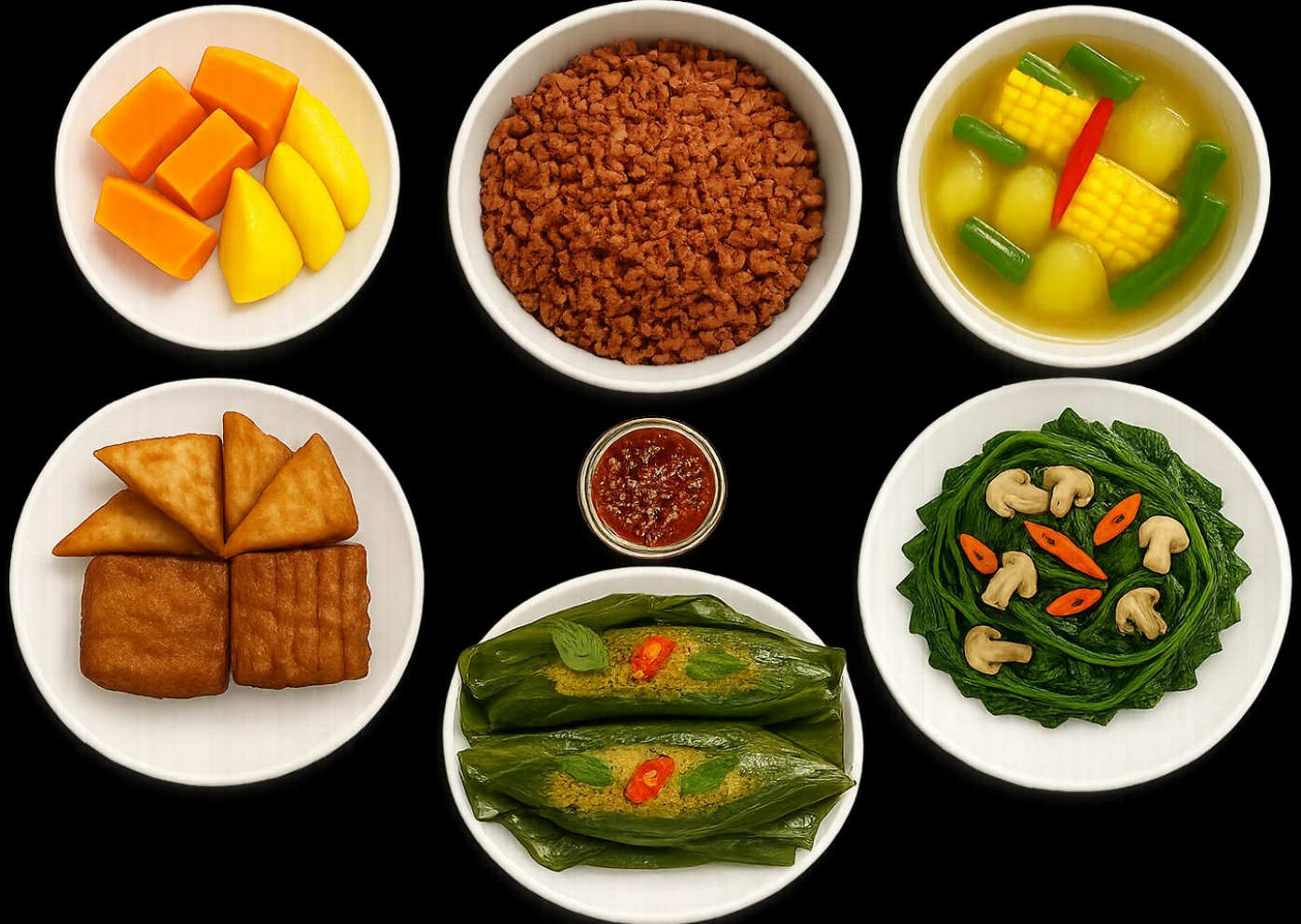
Tofu and Tempeh Bacem

Cah Kangkung dan jamur

Sayur Asem

Sambal

Buah papaya dan mangga



# Key Findings Summary

Aligning national dietary guidelines with the PHD Principle's global sustainability targets is feasible and can support healthier, more affordable diets in Indonesia



Demonstrated feasibility of Planetary Healthy Diet adaptation in Indonesia



Culturally and convenience menu development



**Nutritional adequacy with affordability**




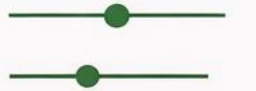





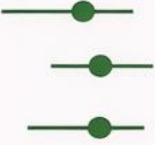

Clear pathway for National Nutrition Guidelines modification





Evidence-based policy recommendations

# Evidence from Asia: Plant-Forward Benefits

Strongest benefits seen with healthful plant-forward patterns; unhealthy plant-based diets may increase risk.

Study & Population	Outcome	Hazard Ratio (HR) [95% CI] (Highest vs. Lowest Adherence, dex.)	Interpretation
 <b>Taiwan</b> Vegetarian Diet & Stroke Shanghai Vegetarian Study Tseng et al, 2023	<ul style="list-style-type: none"> <li>Stroke (All)</li> <li>Ischemic Stroke</li> </ul>	 <b>0.52</b> [0.37–0.71] <b>0.41</b> [0.25–0.68]	 <b>Healthful Pattern:</b> Vegetarian diets associated with ~48% lower stroke risk ~59% lower ischemic stroke risk.
 <b>South Korea</b> Unhealthy Plant-Based Diet & Metabolic Syndrome Korean Genome & Epidemiology Study (KoGES, n=66,599) Kim et al, 2023	<ul style="list-style-type: none"> <li>Metabolic Syndrome</li> </ul>	 <b>1.50</b> [1.23–1.83]	 <b>Unhealthy Pattern:</b> Higher intake of refined grains, added sugars, and salty foods linked to 50% higher risk.
 <b>China</b> Plant-Based Diet Index (PDI) & Chronic Disease Risk China Kadoorie Biobank Iht et al, 2024	<ul style="list-style-type: none"> <li>Obesity</li> <li>Hypertension</li> <li>Type 2 Diabetes</li> </ul>	 <b>0.77</b> [0.73–0.81] <b>0.79</b> [0.78–0.91] <b>0.81</b> [0.78–0.84]	 <b>Healthful Pattern:</b> Higher PDI linked to lower risk of obesity, hypertension, and T2D.

 Lower Risk | Higher Risk   
 (HR < 1.0 Favors Exposure)

Sources, Teng et al., JAMA Network Open, 2023; Kim et al., Clinical Nutrition, 2023; Zhang et al., Diabetes Care, 2024; Li et al., Clinical Nutrition, 2023.  
 (All prospective cohort studies (n 2023))

# Policy Opportunities in Indonesia

Strengthening policies and programs to build healthy, sustainable, and just food systems for all

NEW

## PP No. 28/2024

### Implementation of the Health Law



- ✓ Strengthens nutrition labelling (Front-of-Pack "Nutri-Level")
- ✓ Mandatory for packaged foods industry
- ✓ Empowers consumers to make healthier choices
- ✓ Supports prevention of non-communicable diseases



Impact: Better food environment, informed choices, healthier population

## Makan Bergizi Gratis (MBG)

### National Free Nutritious Meal Program



- ✓ Reach millions of Indonesian children (PAUD-SMA) & pregnant women
- ✓ High opportunity to improve diet quality
- ✓ Provides balanced meals with diverse plant proteins (tempe, tofu, legumes), animal protein (egg), vegetables, and fruit
- ✓ Supports child growth, learning & productivity
- ✓ Strengthens local food system & equity



Impact: Better nutrition, better learning, stronger future generations

NEW

## NEW REGULATION Food Labelling



- ✓ Front-of-Pack Nutrition Labelling (Nutri-Score)
- ✓ Mandatory warning labels for high sugar, salt, fat
- ✓ Clearer, simpler, and more consistent labels
- ✓ Supports healthier choices and reformulation



Impact: Healthier choices, industry reformulation, reduced NCD risk

## Ministry of Health Nutrition Programs

### Pemberian Makanan Tambahan (PMT) by Ministry of Health



#### For Pregnant Women

- PMT for pregnant women with nutritional risk (KEK)
- Provides extra food to meet micronutrient & energy needs
- Helps prevent low birth weight & maternal health problems



#### For Breastfeeding Mothers

- PMT for breastfeeding mothers
- Supports adequate nutrition for high lactation
- Improves breast milk quality & maternal health



#### For Children under 2 Years (Balita)

- PMT for children 6–23 months with nutritional risk
- Supports growth & development
- Helps prevent stunting & malnutrition



Implemented through Puskesmas, Posyandu, community cadres & local governments  
Targeted, tailored and equitable support for the first 1000 days of life

## Other Key Nutrition Programs by Ministry of Health



### Stunting Prevention & Management

Strengthening early detection, intervention, and management of stunting



### Micronutrient Supplementation

Iron tablets for adolescents & women, Vitamin A for children, Zinc & other micronutrients



### Iodine Deficiency Disorders (IDD) Control

Iodized salt program and monitoring of iodine nutrition



### Breastfeeding Promotion

Early initiation, exclusive breastfeeding for 6 months, continued breastfeeding



### Immunization Program

Complete immunization for children to prevent infectious diseases



### Adolescent Health & Nutrition

Promotes healthy lifestyle, anemia prevention, and reproductive health



### Food Fortification Program

Fortification of wheat flour, cooking oil, and other staple foods



### Disease Prevention & Control

NCD prevention (GENTAS), tuberculosis, and other programs



Indonesia has strong foundations.

Now, the opportunity is to **scale up, integrate, and ensure no one is left behind.**

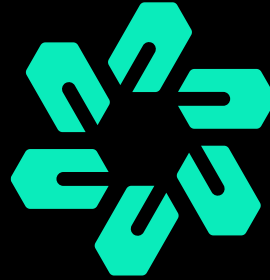
# The 2025 EAT-Lancet Commission Framework

A global food system transformation can improve health, protect the planet, and promote justice making healthy diets affordable, accessible, and sustainable for all.



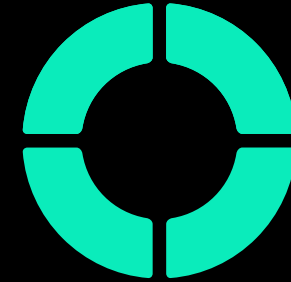
HEALTH

Planetary Health Diet



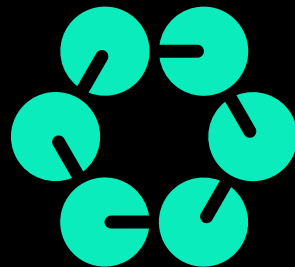
ENVIRONMENT

Food System Planetary Boundaries



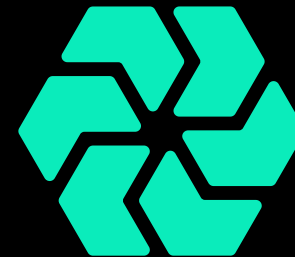
JUSTICE

Social Foundations



MODELLING

Pathway to 2050



TRANSFORMATION

Combined Actions



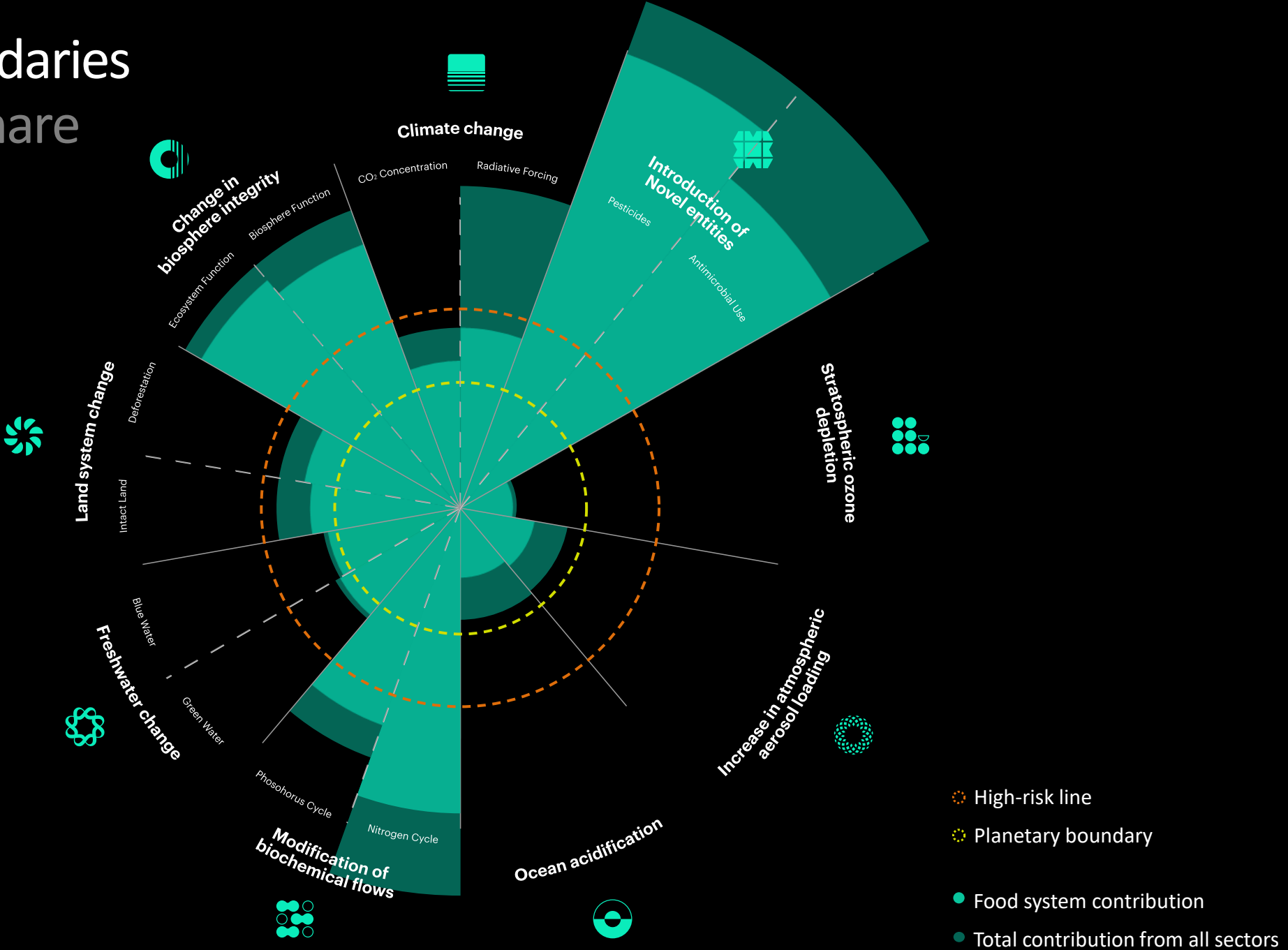
Our **Commissioners,**  
Youth Fellows and Authors

# Food System Shares of the Planetary Boundaries



# Planetary Boundaries

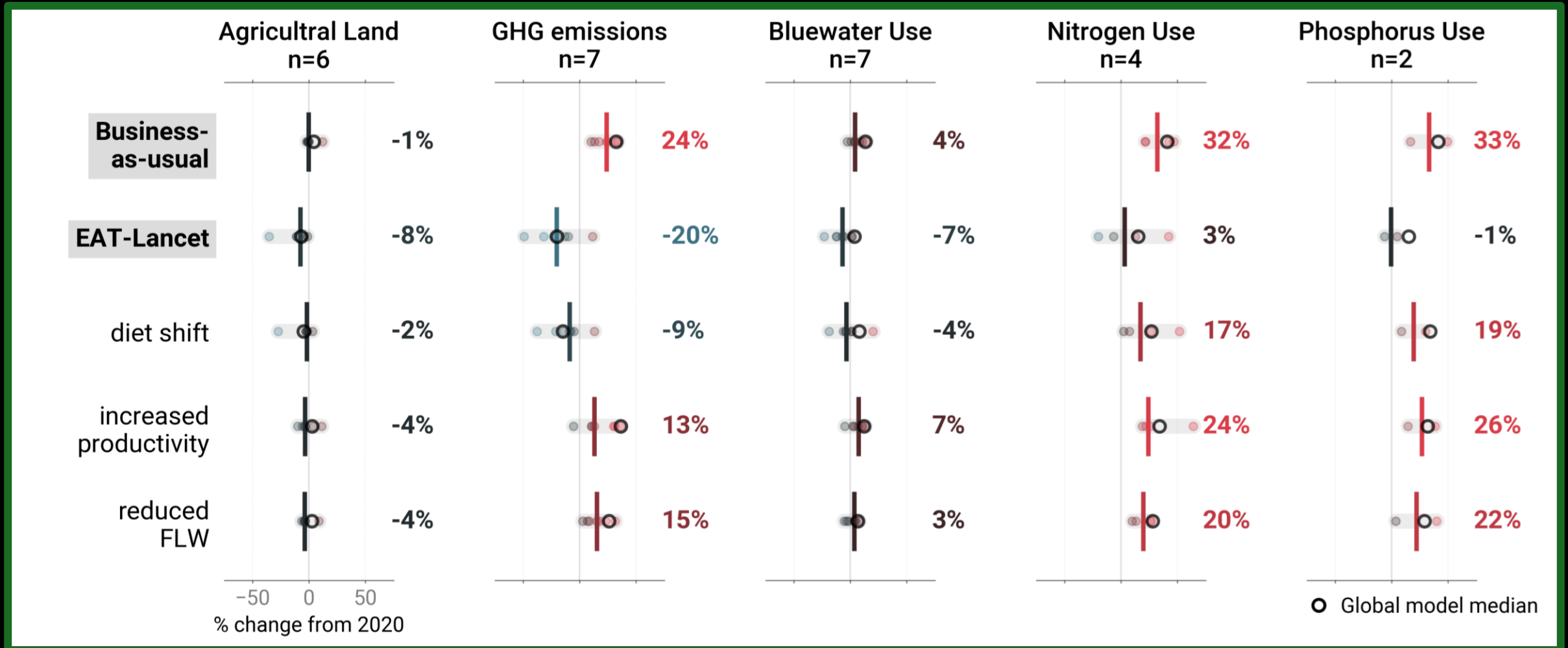
## Food System Share



Rockström, J. et al. 2025. The EAT–Lancet Commission on healthy, sustainable, and just food systems.

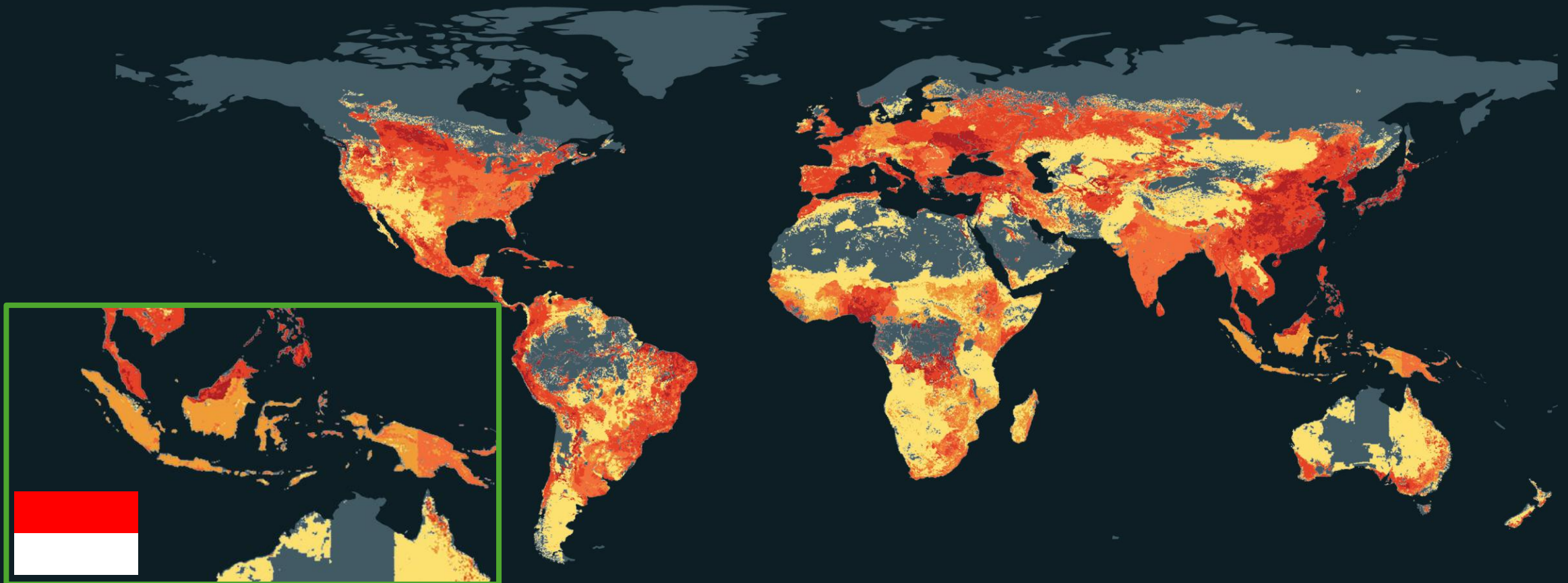
# Environmental impact scenarios 2050 vs 2020

## South-East Asian outlook



# Current Planetary Status

## Pesticide Risk Score

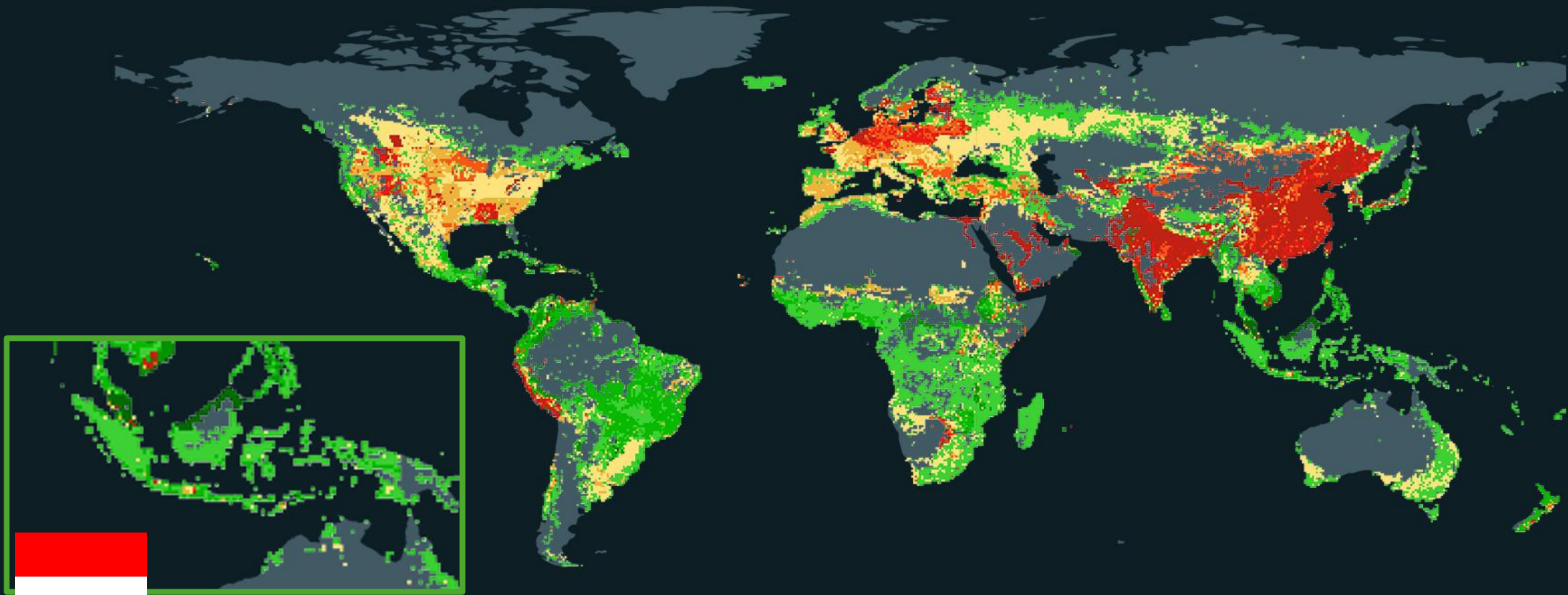


### Pesticide Risk Score

● No Risk ● 0-1 ● 1-2 ● 2-3 ● 3-4 ● >4

# Current Planetary Status

## Nitrogen Surplus

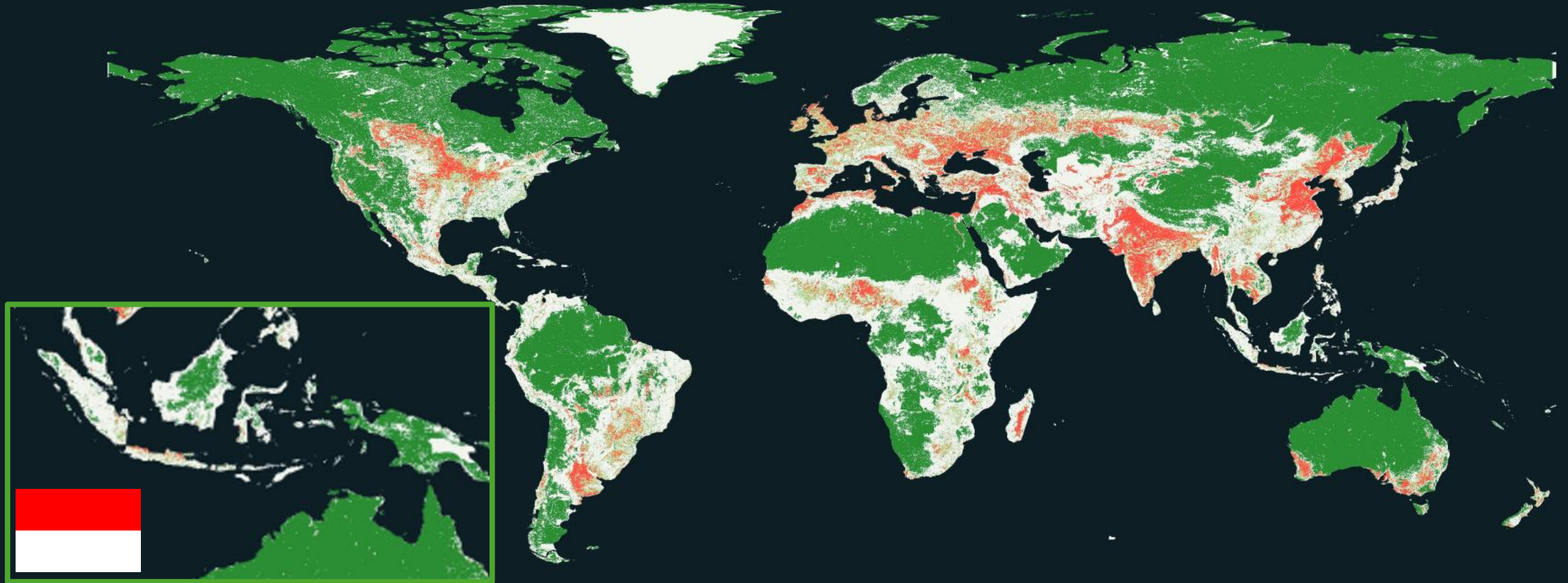


Exceedance Of Local N Surplus Boundary (Kg N Ha/Year)

< -80   -60 - -80   -60 - -40   -40 - -20   -20 - -0   0 - 20   20 - 40   40 - 60   60 - 80   >80

# Current Planetary Status

## Ecosystem Functional Integrity



Functional Integrity (%)



● Intact Land

Justice 



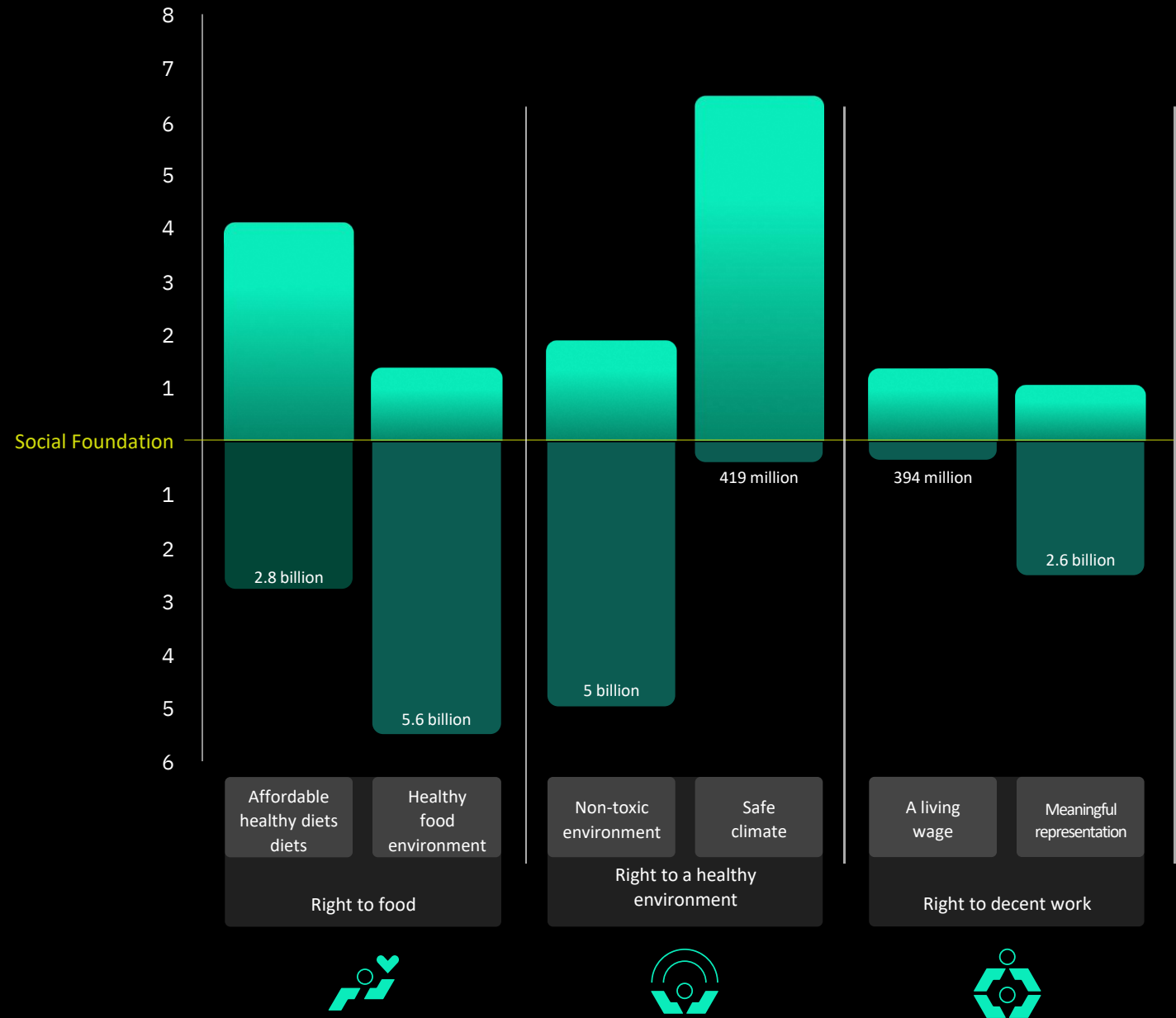
# Our Justice Framework



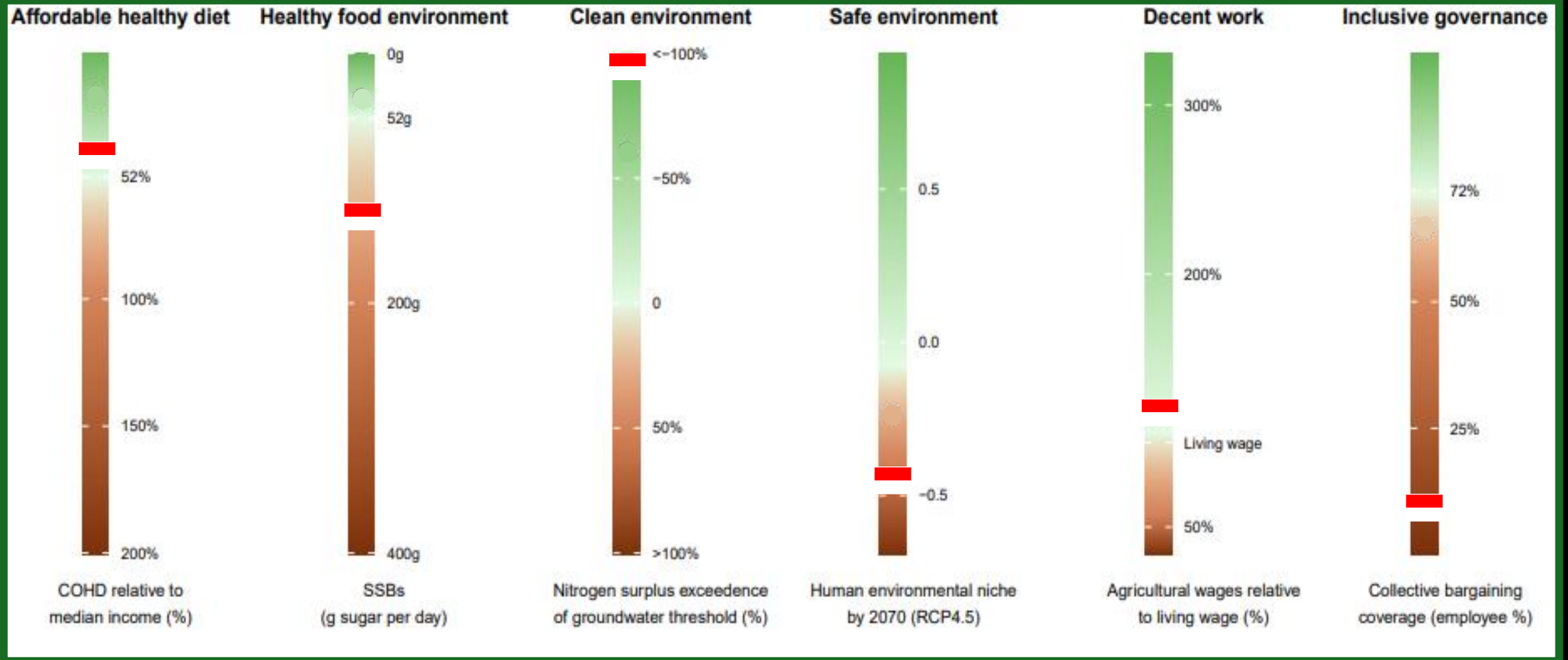


# Social Foundations

Billions of people  
fall Short



# Justice in food systems Indonesian outlook



# The Power of Food: Modelling results





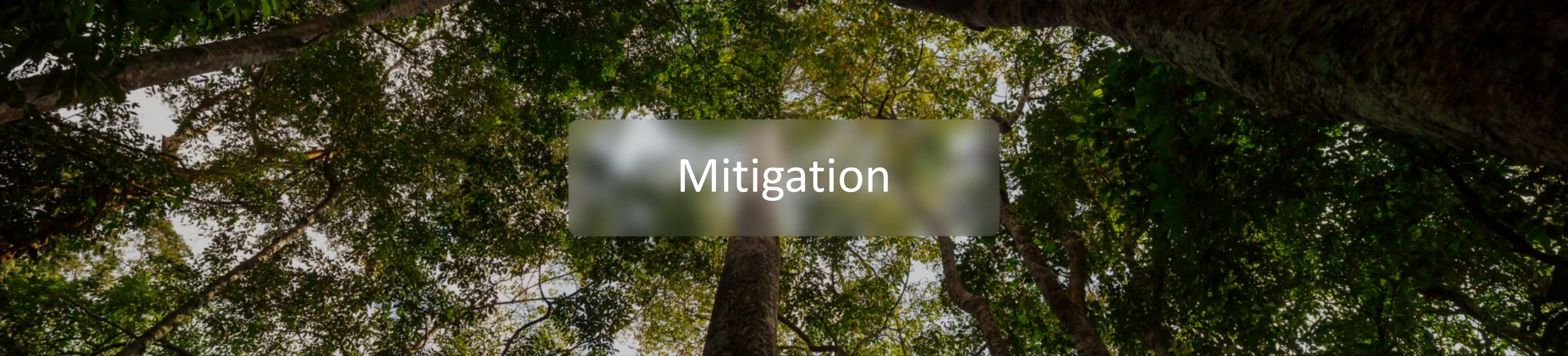
What We  
We Eat



What (How)  
We Produce

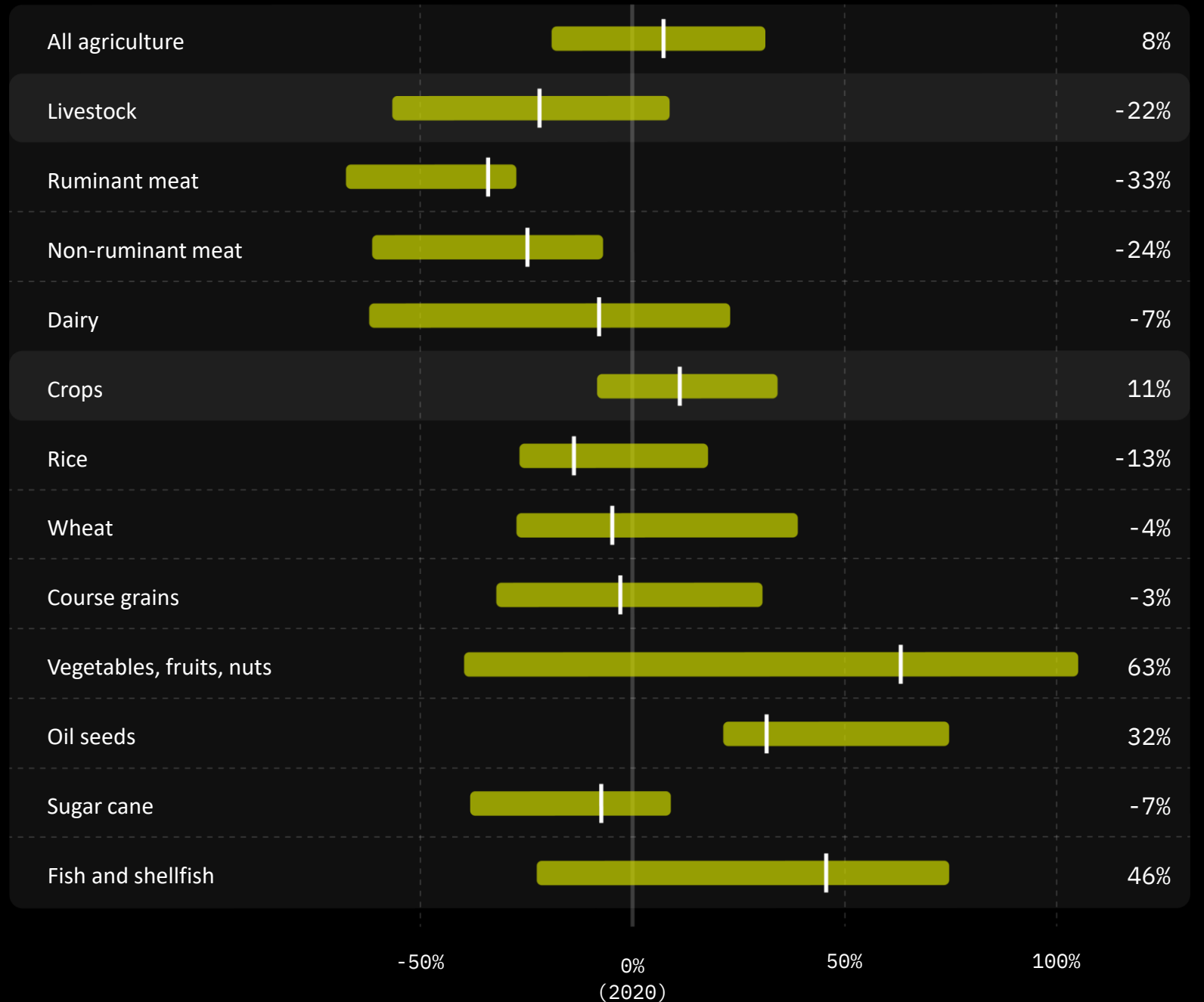


What We Throw  
Throw Away



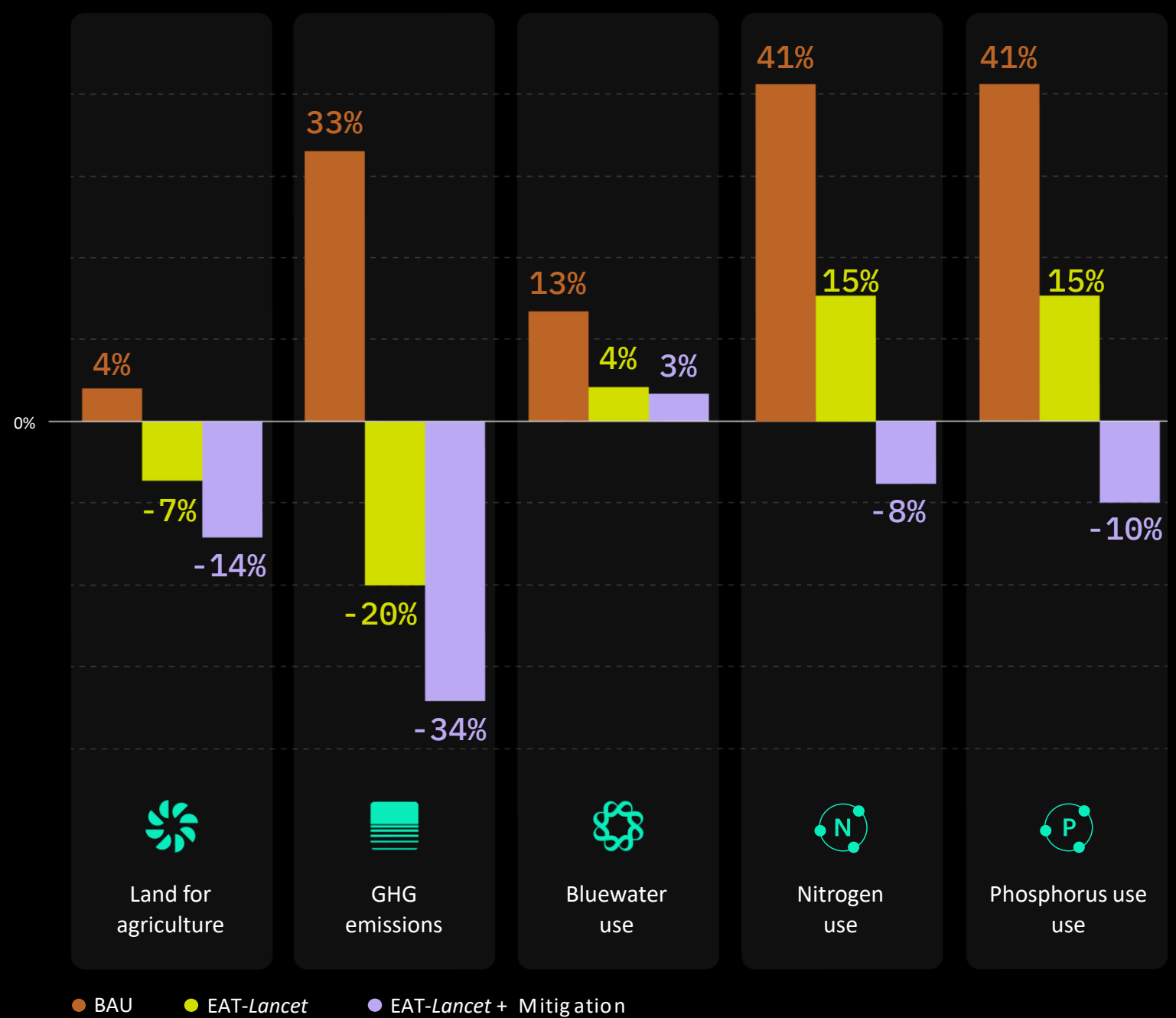
Mitigation

# Modelling to 2050 achieving healthy diets requires a different focus



# Modelling to 2050

## Key interventions for environment



# Solutions and Transformation



# The Transformation Wheel

## Solutions and Actions



Food environment interventions

Price based

Non price based



Recognise in dietary guidelines



Tenure rights



Investments in transitions



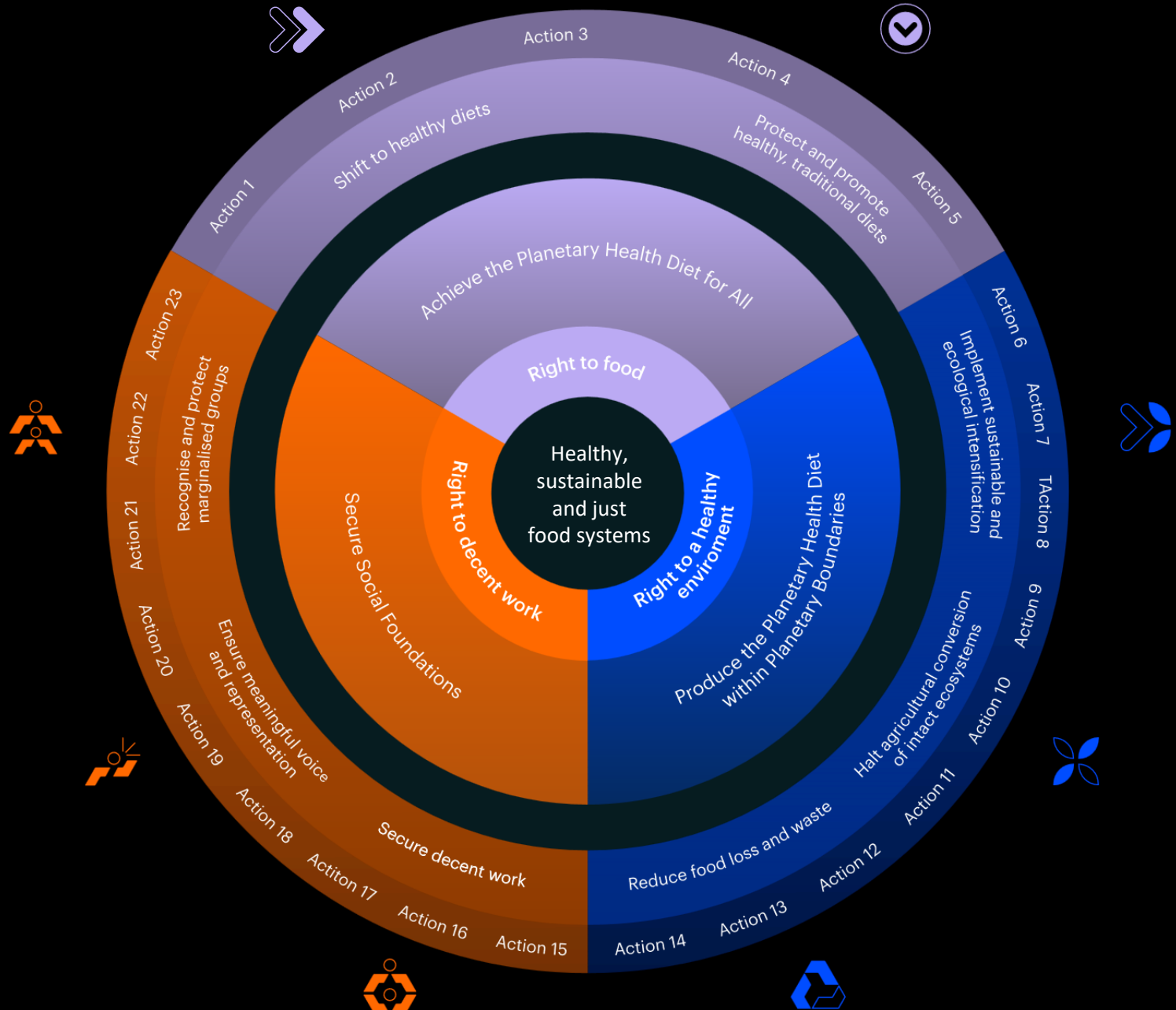
Transparency in lobbying



Social protection policies



School meals



# The Food Transformation Wheel

## Solutions and Policy Actions for Indonesia

Building healthy, sustainable, and just food systems that leave no one behind

### ✓ WHAT INDONESIA HAS DONE



#### POLICIES & GUIDELINES

Fiscal policies for healthy foods, dietary guidelines (Gizi Seimbang), and some protection for local food systems.



#### RIGHTS & INCLUSION

Recognition of Indigenous Peoples' rights and efforts to support local communities and food producers.



#### INVESTMENTS & PROGRAMS

Investments in food system research, innovation, infrastructure, and school meals programs.



### ⚠ WHERE INDONESIA NEEDS TO ACT



#### MAKE HEALTHY DIETS AFFORDABLE

Ensure fair prices and decent incomes for food producers.



#### PROTECT PEOPLE & PLANET

Strengthen food supply chains, reduce pollution, and protect ecosystems and biodiversity.



#### PROMOTE SUSTAINABLE PRACTICES

Scale up sustainable agriculture and climate-smart practices.



#### PROTECT CHILDREN

Restrict marketing of unhealthy foods, especially to children.



Actions must be inclusive, equitable, and focused on leaving no one behind.



Thriving Local Food Systems



Social Justice & Economic Inclusion

Resilient Natural Resources

Thank you!

The background is a dark teal color. On the right side, there are several concentric, semi-transparent teal circles of varying sizes, creating a ripple effect that fades into the background.