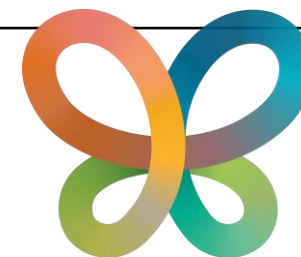


Linking better biodiversity performance to economic feasibility - Measuring and Rewarding Biodiversity in Dairy



Today's programme

16:45 – 16:55	Welcome and framing – Daan Groot,
16:55 – 17:05	Biodiversity in agriculture worldwide – WWF's global strategy, key programmes and lessons – Joao Campari
17:05 – 17:20	The Nuffield Journey: How to measure and reward biodiversity in dairy – global perspective – Wilco Brouwer de Koning
17:20 – 17:30	Financial evidence from the Netherlands
17:30 – 17:00	Discussion



Welcome



Daan Groot

**Managing director Nature^Squared,
coordinator Nature Finance
Programme at the Netherlands Pavilion**

Joao Campari

**Global Leader Food & Agriculture
WWF International**



Nature-positive Agriculture

The role of the Dairy Sector

Joao Campari, Ph.D.
Global Leader, Food and Agriculture
WWF International



CBD COP17
Yerevan
October, 2026



Food & Agriculture 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

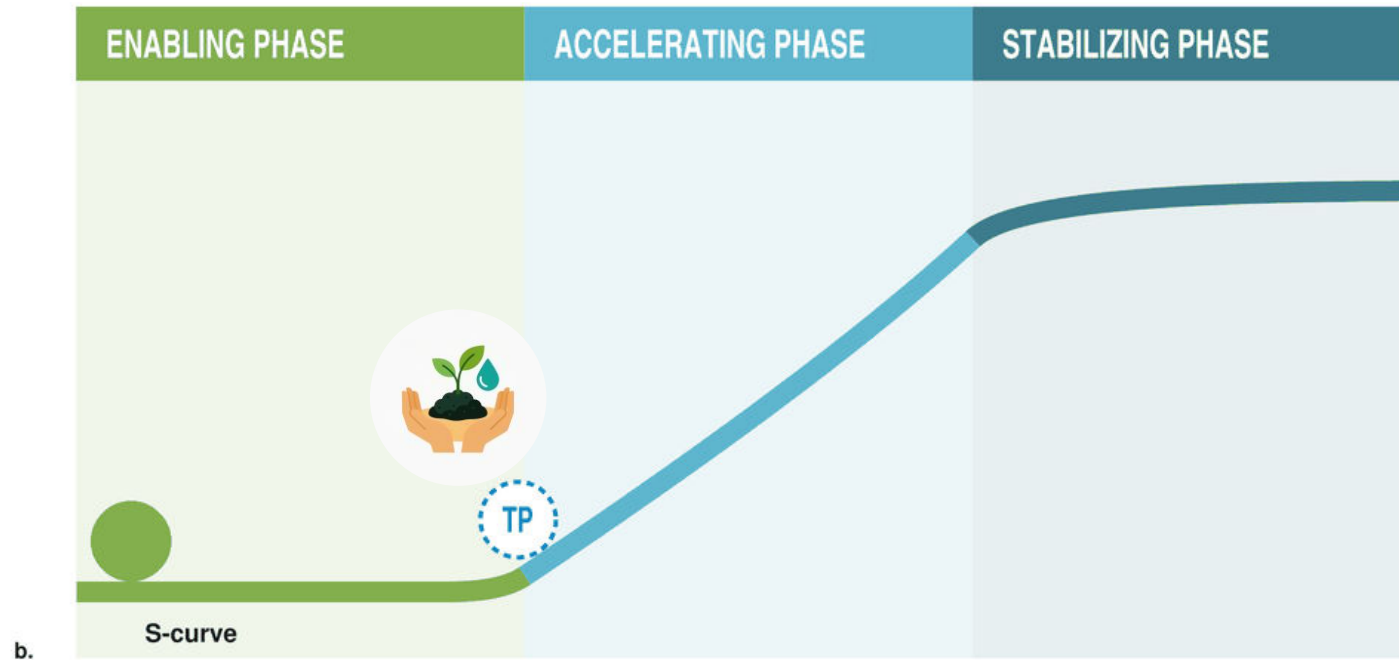
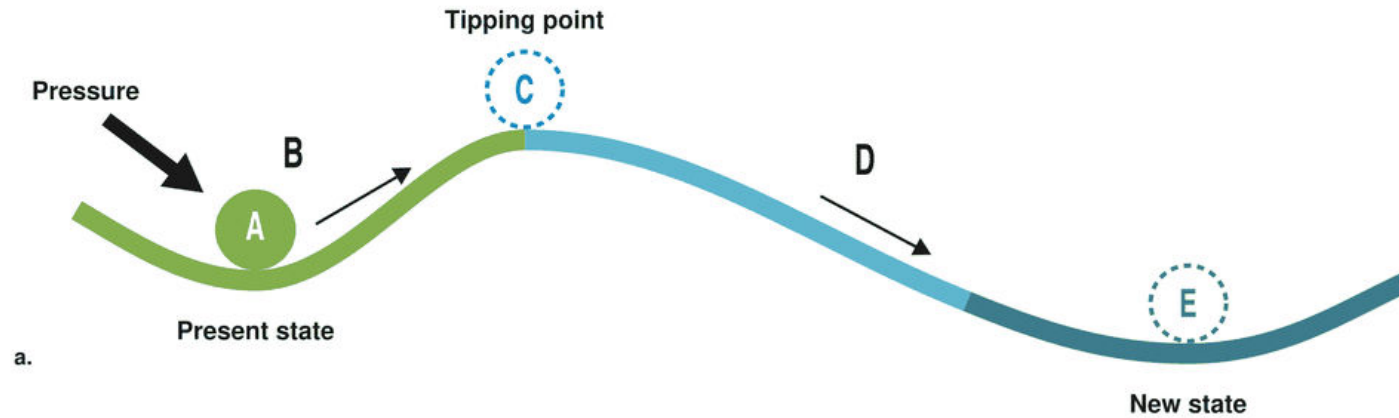


HUNGER
10%

Of people go hungry

NET VALUE OF AGRIFOOD SYSTEMS
NEGATIVE USD11 TRILLION PER YEAR

POSITIVE TIPPING POINT FOR FOOD & AGRICULTURE



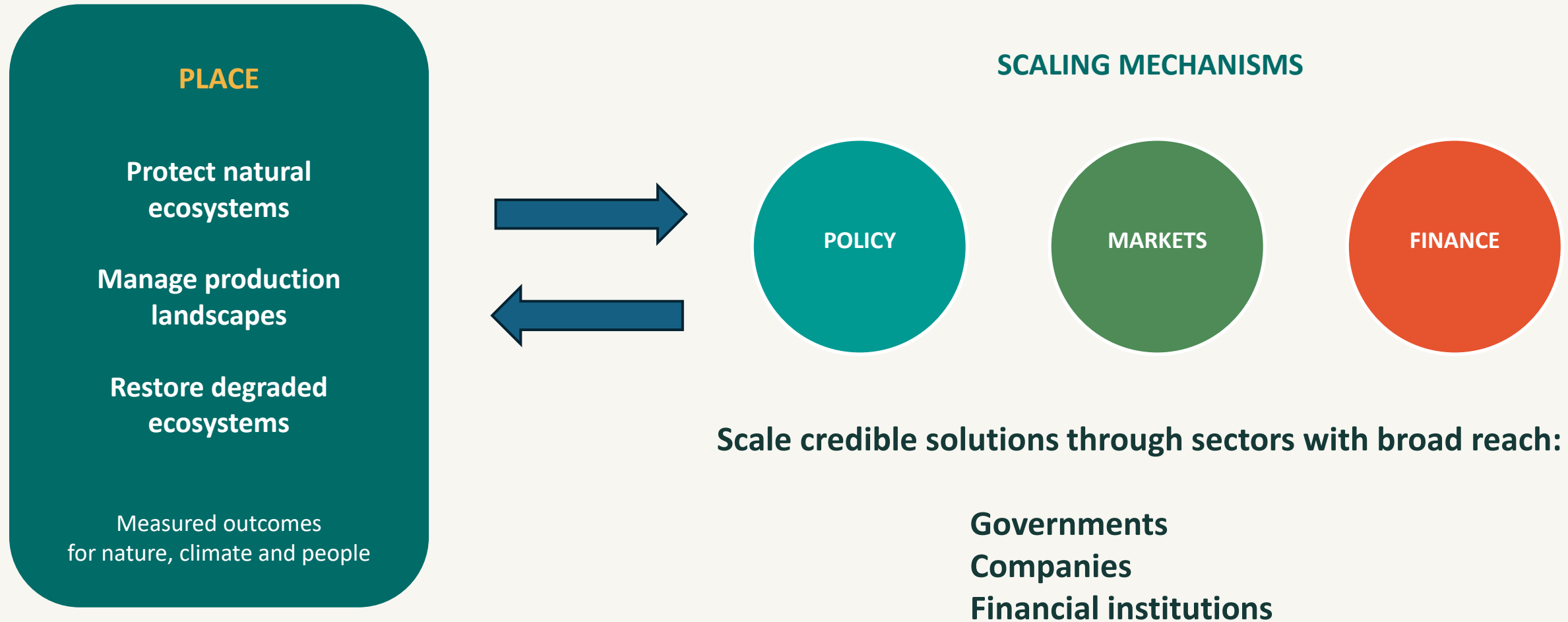
Why nature-positive agriculture?

Food production must move from a driver of nature loss to a driver of recovery.



We work on food and agriculture as a **CONSERVATION STRATEGY**

Not a sector silo: it connects place-based action with system change.



PLACE BASED ACTION

Adoption of NPA practices is the overarching direction of travel



Context-specific pathways • measurable outcomes • safeguards • continuous learning

Judge success by OUTCOMES, NOT LABELS

SCALING MECHANISMS

Scale must be designed in from the start



1

Prove outcomes in place

Use landscape assessment, local priorities and measurable outcomes.

2

Build enabling conditions

Engage government, market actors and finance early, not at project end.

3

Transfer and institutionalize

Replicate what works, redirect incentives and embed accountability.



The gap is huge. There is no silver bullet.



Nature-positive agriculture is a journey for continuous improvement, not a destination.

- The direction is clear – protect, manage and restore, judged by outcomes.
- Guidance, metrics and tools are being developed with countries, partners and producers.
- Landscapes cannot wait – we learn by doing, share what works and improve as we go.
- Being honest about what is still under construction is what keeps the framework credible.



Start where you are, build on what works, and keep improving – together.

Wilco Brouwer de Koning

**Farmer, LTO Dairy board member,
SPCC member IDF, WFO Nature &
Biodiversity working group member,
Nuffield Scholar**



Biodiversity in Dairy



How to measure and reward biodiversity in dairy?

Wilco Brouwer de Koning | Dairy farmer & Nuffield Scholar 2025–2026

COP17 SIDE EVENT • DUTCH PAVILION, YEREVAN • 21 OCTOBER 2026



FrieslandCampina
nourishing by nature



agrifirm



www.biodiversityindairy.com

01 · OUR FARM

Sustainable
family dairy
farming in the
Netherlands.

Ter Coulster · Heiloo · since 1954



Wilco Brouwer de Koning

Dairy farmer, family man and farmers' representative

Family	Mirjam, Jonathan, Tessa and Lise
Farm	3rd-generation dairy farmer at Ter Coulster, Heiloo
LTO	Board member, Dutch farmers' organisation
IDF	International Dairy Federation: dairy farmers' representative worldwide
WFO	Nature & Biodiversity Working Group, World Farmers' Organisation
Nuffield	Nuffield Scholar 2025–2026: measuring and rewarding biodiversity in dairy



Dairy farm Ter Coulster

Third generation, two farm locations in the heart of Heiloo

1954

Started by my grandfather
Wim

125 ha

Land in use, half of it our
own

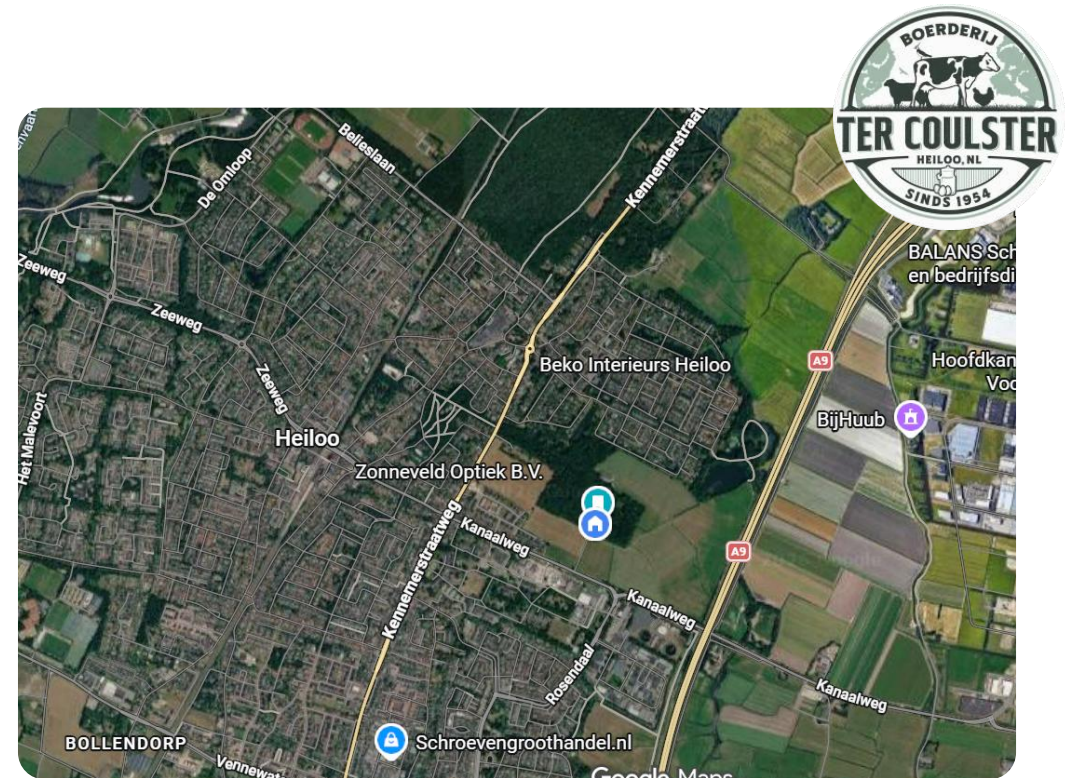
185

Dairy cows, plus 100 calves,
45 sheep and 180 chickens

35 ha

Nature land, next to 81 ha
grass and 9 ha maize

Farming together with my brother, our families and staff.



Our farm, on the edge of Heiloo, North Holland

Core values of our family farm

Producing milk and nature together — and sharing our story



Grazing

Our cows are mainly grass-fed and graze outdoors from April to November.



Milk and nature

On the farm we combine milk production with nature.



Sharing our story

Social media, our own products and events like the spring “dancing cows” party.

Grazing

From April to November — on grass, clover and herbs



Dairy cows

Grazing on the land around the farm

Young stock

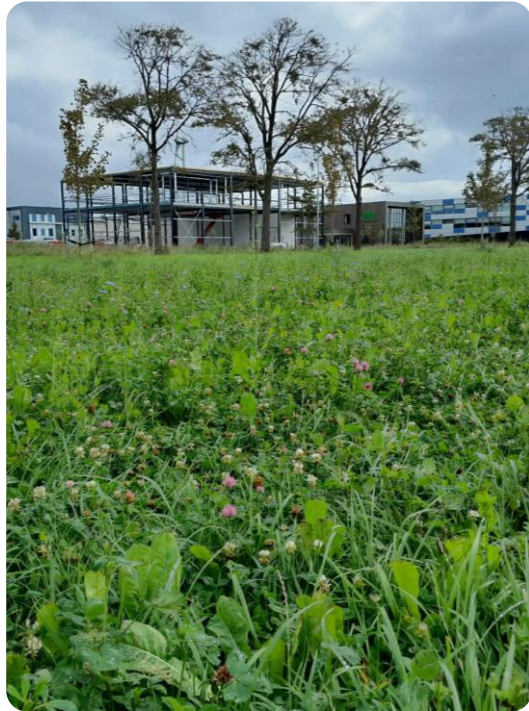
On the fields further away

Nature land

Dry cows and older young stock

Together with nature

Production land: soil and water quality, closing mineral cycles



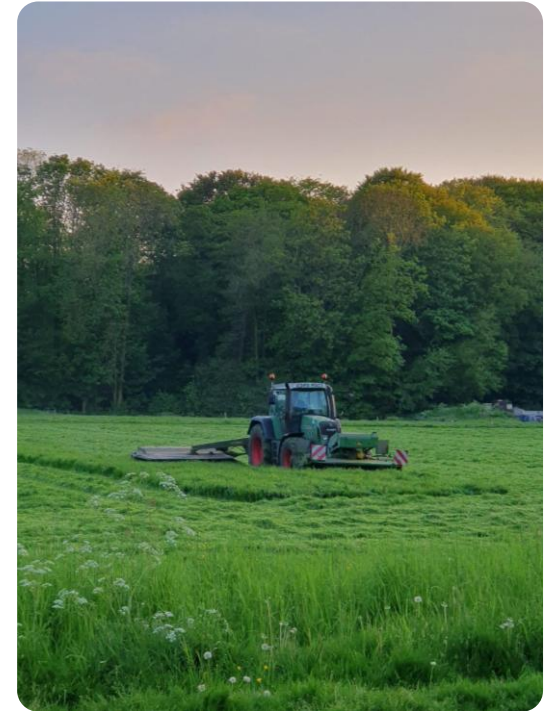
Production land



Production land + extra nature



Nature land



Together with nature

Production land with extra nature: protection and measures for meadow birds



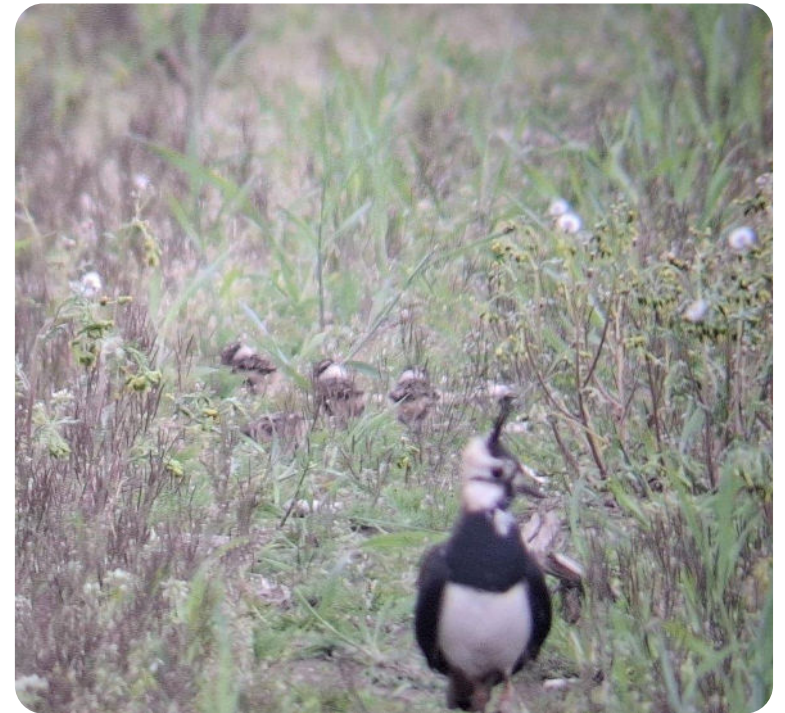
Production land

Production land + extra nature

Nature land

Together with nature

Nature land: meadow birds come first — no quality production



Production land

Production land + extra nature

Nature land

Research question

“How to measure and reward biodiversity in dairy.”

Objectives

1

Learn from global best practices in biodiversity measurement

2

Understand different reward mechanisms across countries

3

Identify scalable solutions for Dutch, European and global dairy

4

Tell the story of sustainable dairy farming

02 · WHAT I LEARNED AROUND THE WORLD

Nuffield Scholarship 2025–2026 ·
biodiversityindairy.com





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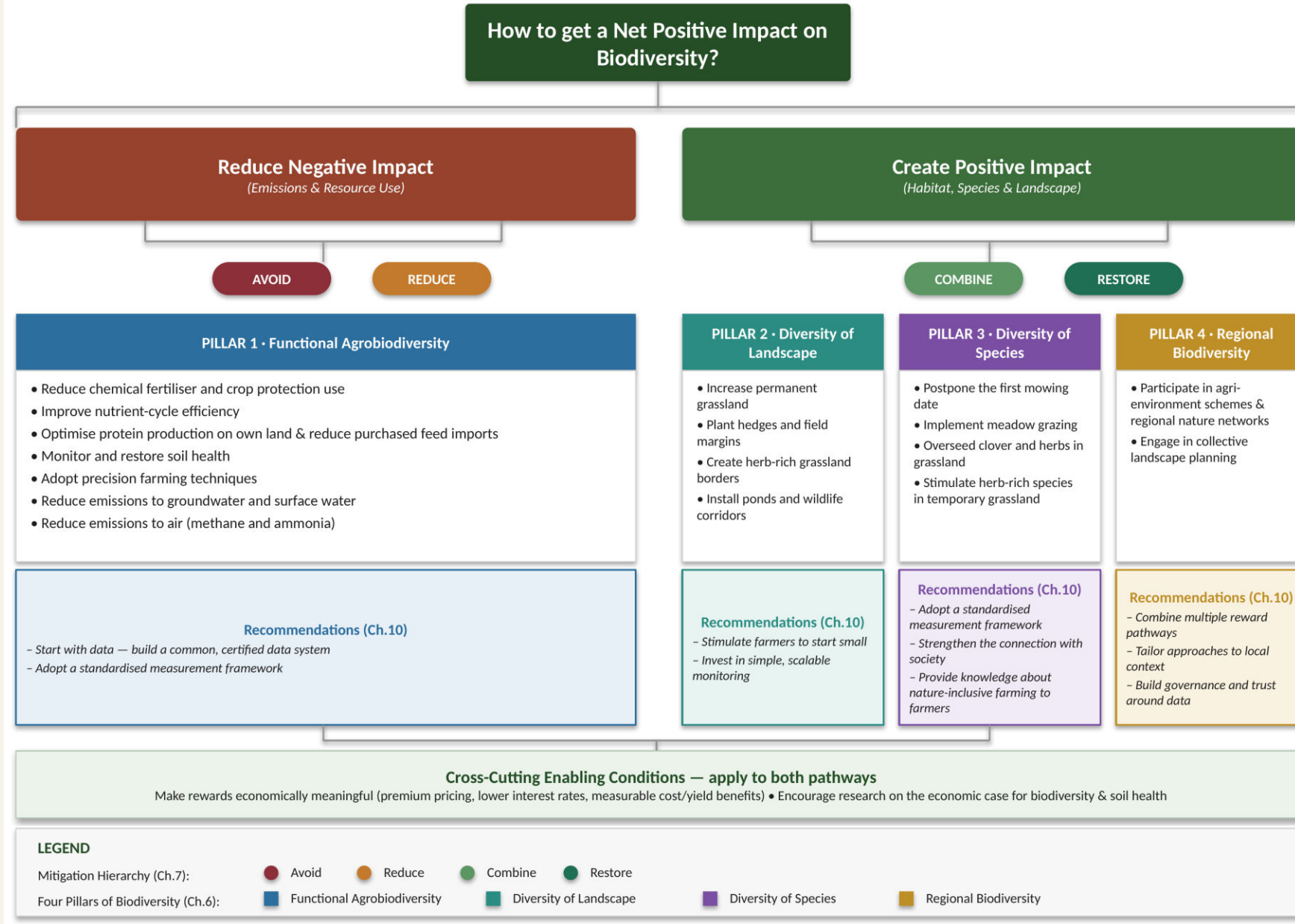


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HOW TO MEASURE AND REWARD BIODIVERSITY IN DAIRY

Decision tree — pathways to a positive biodiversity impact | based on the Nuffield summary report of Wilco Brouwer de Koning



Benefits of rewarding biodiversity

For farmers

Clear action perspective

Financial rewards

Lower compliance risk

Resilience & soil health

For the supply chain

Quantifiable metrics

Lower sourcing risk

Brand value

ESG alignment

For society

Restored biodiversity

Meadow birds & species

Cleaner water & air

Cultural landscapes

Emerging technologies

Cheaper, faster and more objective monitoring



On-farm data and KPIs

The foundation: farm records & sensors in one trusted data system



Chirrup.ai

AI bird sound as a health indicator



Satellites

Grassland & hedges seen from space



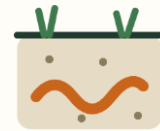
eDNA

Species from one soil or water sample



Sensibee

AI pollinator counts, 365 days a year



Soil sensors

AI image recognition of soil life

03 · BIODIVERSITY MONITOR &
FOQUS PLANET

From measuring
to rewarding: the
Dutch approach.

WWF · FrieslandCampina · Rabobank



An integral assignment, a joint approach

One instrument for many goals

1

Implementation of different goals

Biodiversity, nitrogen, water quality and climate

2

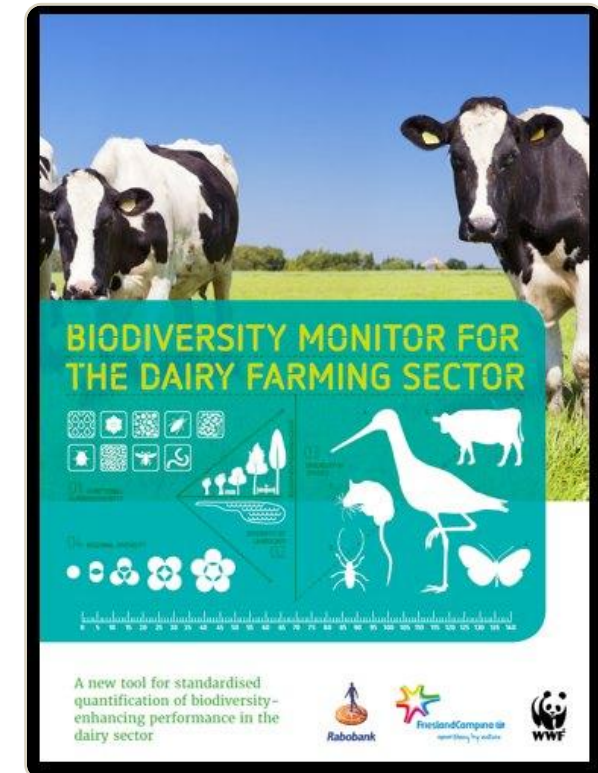
Biodiversity Monitor as tool

Steering on goals, insight into impact

3

Incentive tool for farmers

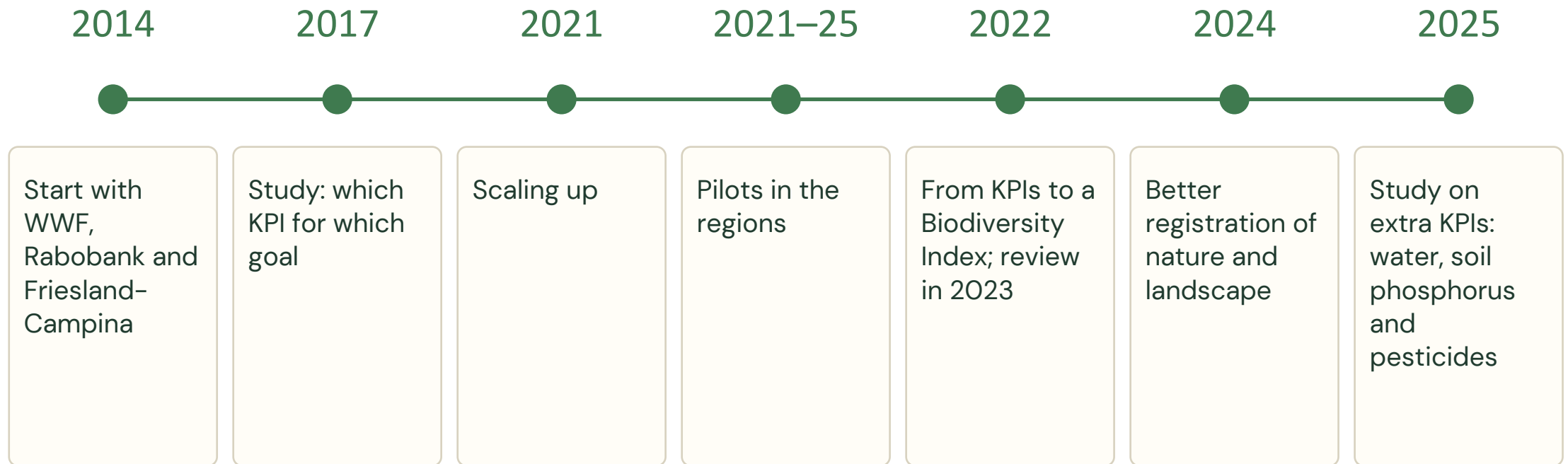
Private and public rewards



Biodiversity Monitor for the Dairy Farming Sector

What did we do?

More than ten years of building the Biodiversity Monitor together



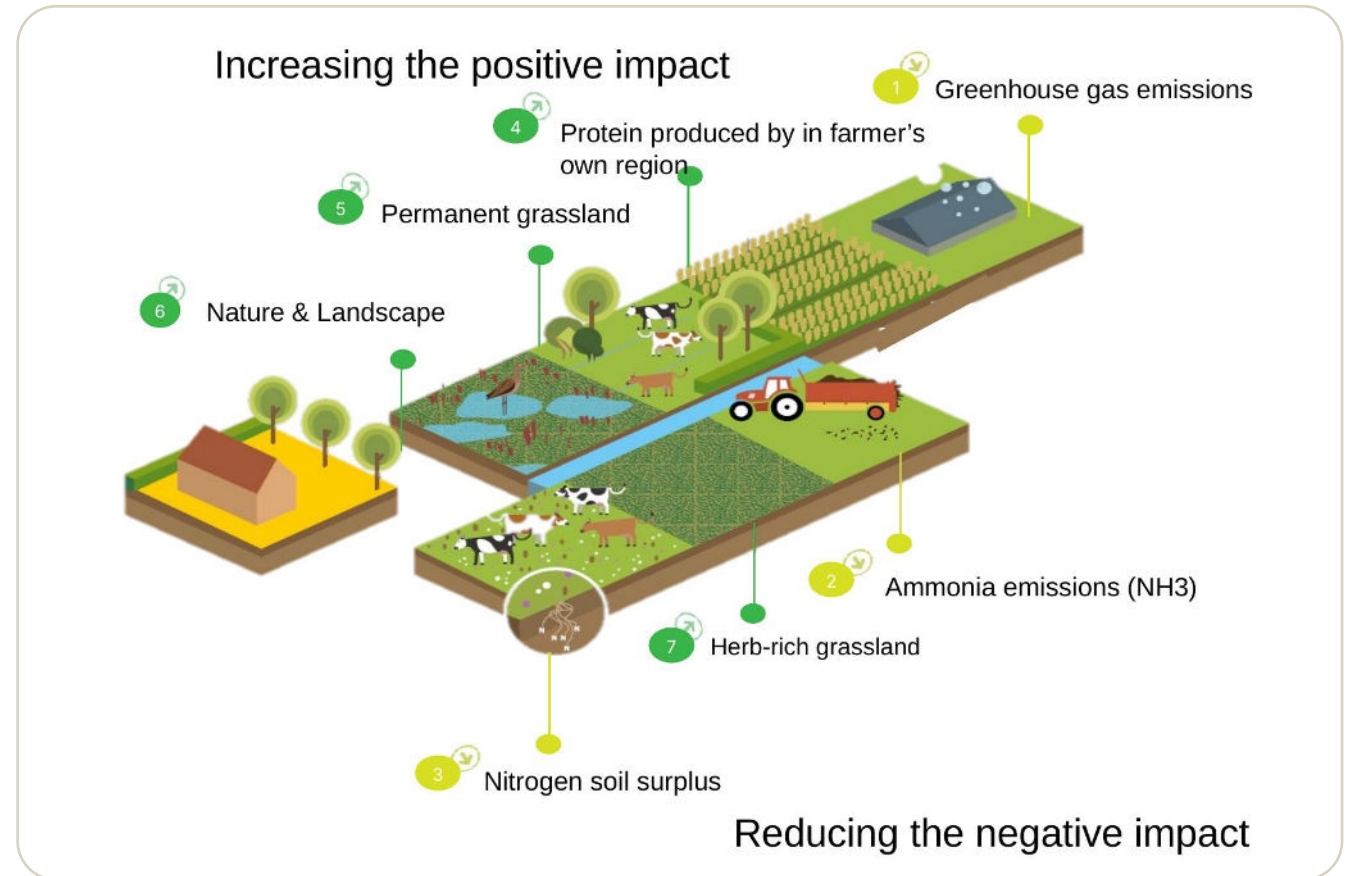
Every step tested with farmers in practice — from pilots to the Foqus planet reward system.

The Biodiversity Monitor

Seven KPIs: reducing the negative impact, increasing the positive impact

- 1 Integral management by the farmer on farm-specific goals
- 2 KPIs make performance transparent and impact measurable
- 3 Preventing trade-offs
- 4 Net positive impact
- 5 Basis for revenue models and rewards

Source: Prototype Biodiversity Monitor for Dairy Farming, Rabobank 2017 (joint publication of the partners)



Foqus planet: integral and results based

FrieslandCampina's reward system for all member dairy farmers in the Netherlands



HOW IT WORKS

Members choose their own measures

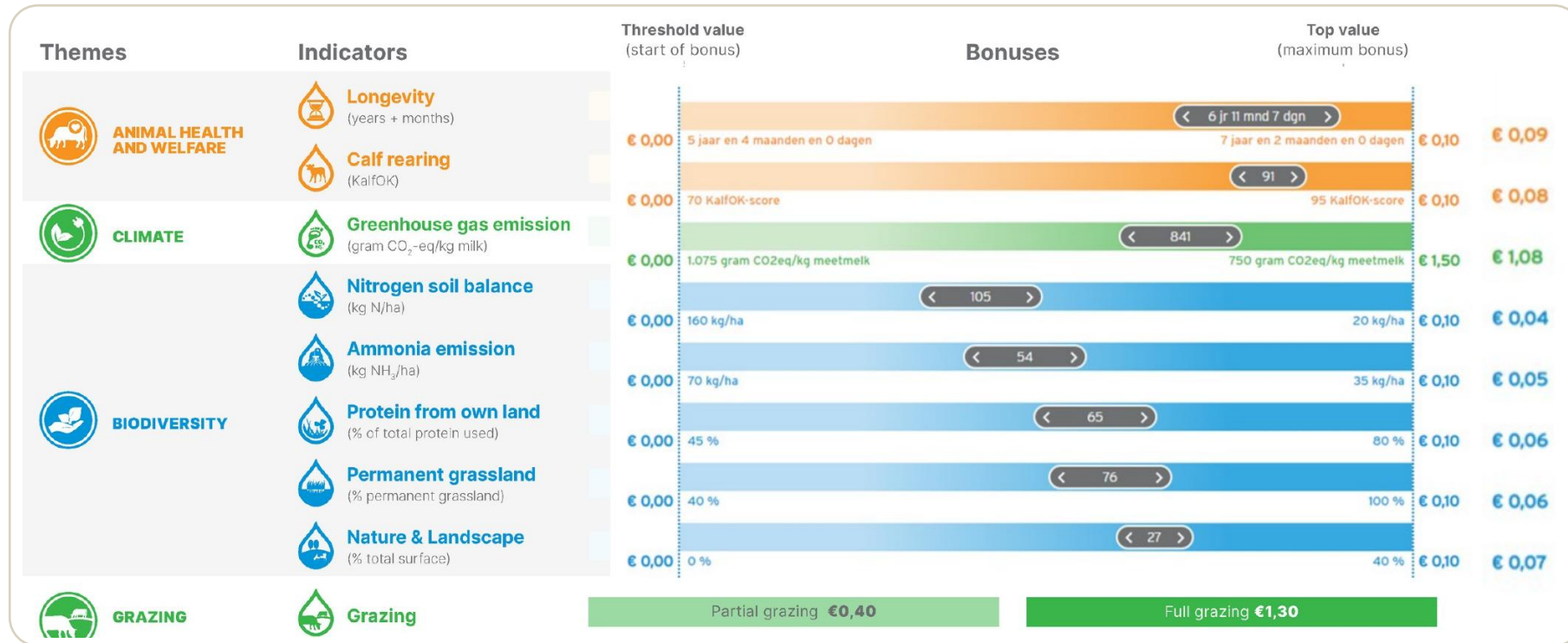
Rewarded for results, not for measures

Animal welfare, climate, biodiversity and grazing at the same time

Biodiversity KPIs come from the Biodiversity Monitor

Ter Coulster in Foqus planet

Our own scores — and what they earn us per 100 kg of milk



€ 2.82

Total bonus per 100 kg milk

— € 0.60

Foqus planet contribution

€ 2.22

Net premium per 100 kg milk



Rabobank: -0.2% interest. Good sustainability results are also rewarded with a lower interest rate.

04 · BACK TO OUR FARM

Measuring,
rewarding — and
telling the story.

Boerderij Ter Coulster · Heiloo



Sharing our story

Open farm, own products and social media



Open farm day

Including the spring "dancing cows" party



Farm shop

Our own products, sold directly to consumers



Vending machines

Fresh from the farm, close to home

boerderijtercoulster.nl • [@boertercoulster](https://www.instagram.com/boertercoulster) • [Facebook /boerderijtercoulster](https://www.facebook.com/boerderijtercoulster)

THE KEY MESSAGE

For sustainable farming, farmers need a sustainable milk price.

Measure it. Reward it. ·
biodiversityindairy.com



Thank you

www.biodiversityindairy.com

Reports, country summaries and presentations

www.boerderijtercoulster.nl · wbdk@live.nl



Biodiversity in Dairy

MANY THANKS TO MY FAMILY AND SPONSORS



FrieslandCampina
nourishing by nature



agrifirm



Let's keep talking. I am always open for a conversation — and you are always welcome to visit our farm, Ter Coulster in Heiloo.



Daan Groot

Managing director Nature^Squared





Costs and benefits of sustainable and regenerative dairy farming

Conditions for sustainable dairy farming



Ministerie van Landbouw,
Visserij, Voedselzekerheid
en Natuur



De **Natuur**verdubbelaars
OMDAT DE NATUUR
BETER VERDIENT

wij•land

boerennatuur
Fryslân

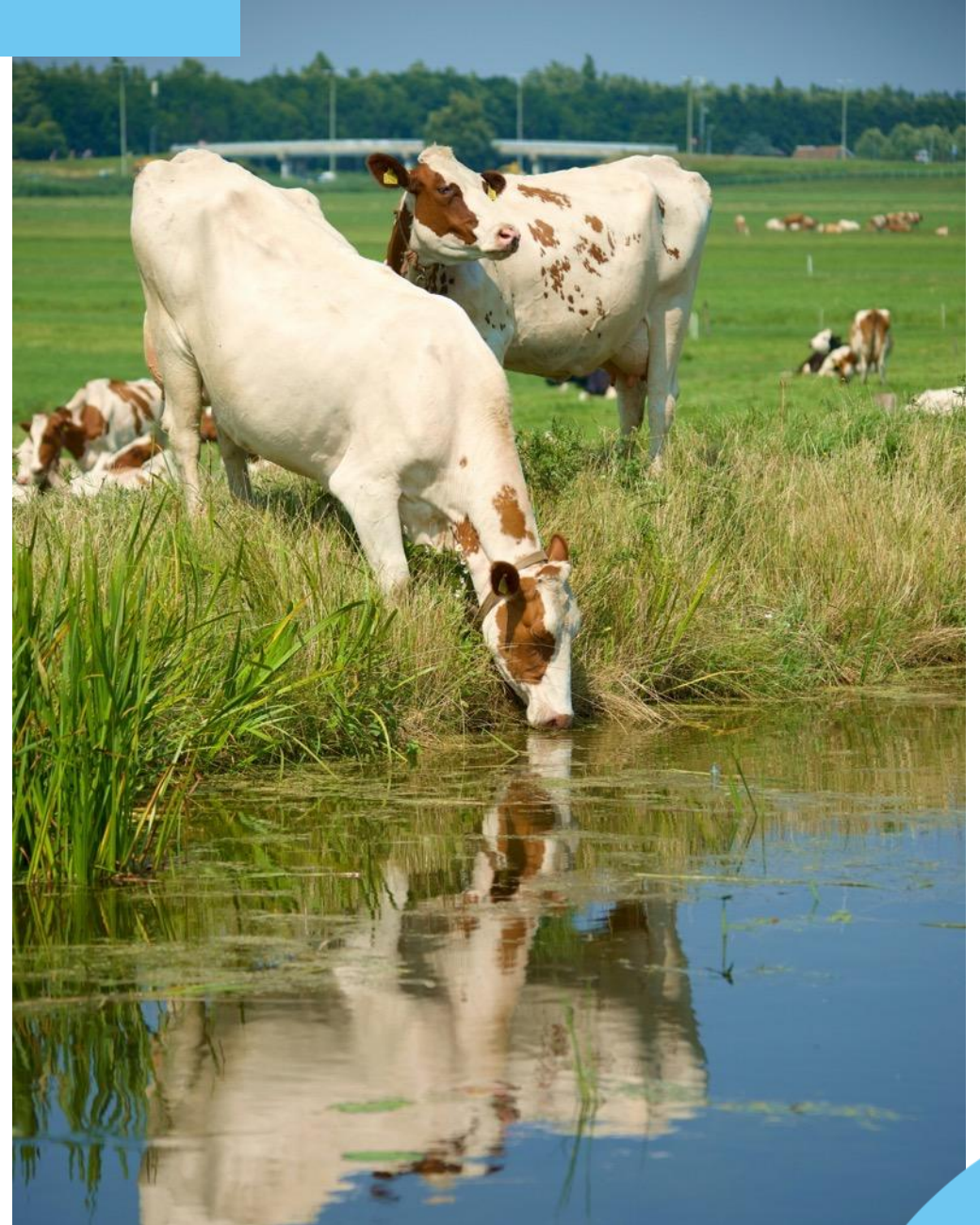
**BRABANTS
BODEM**

PROJECT IN
VAN
GOGH
NATIONAAL
PARK



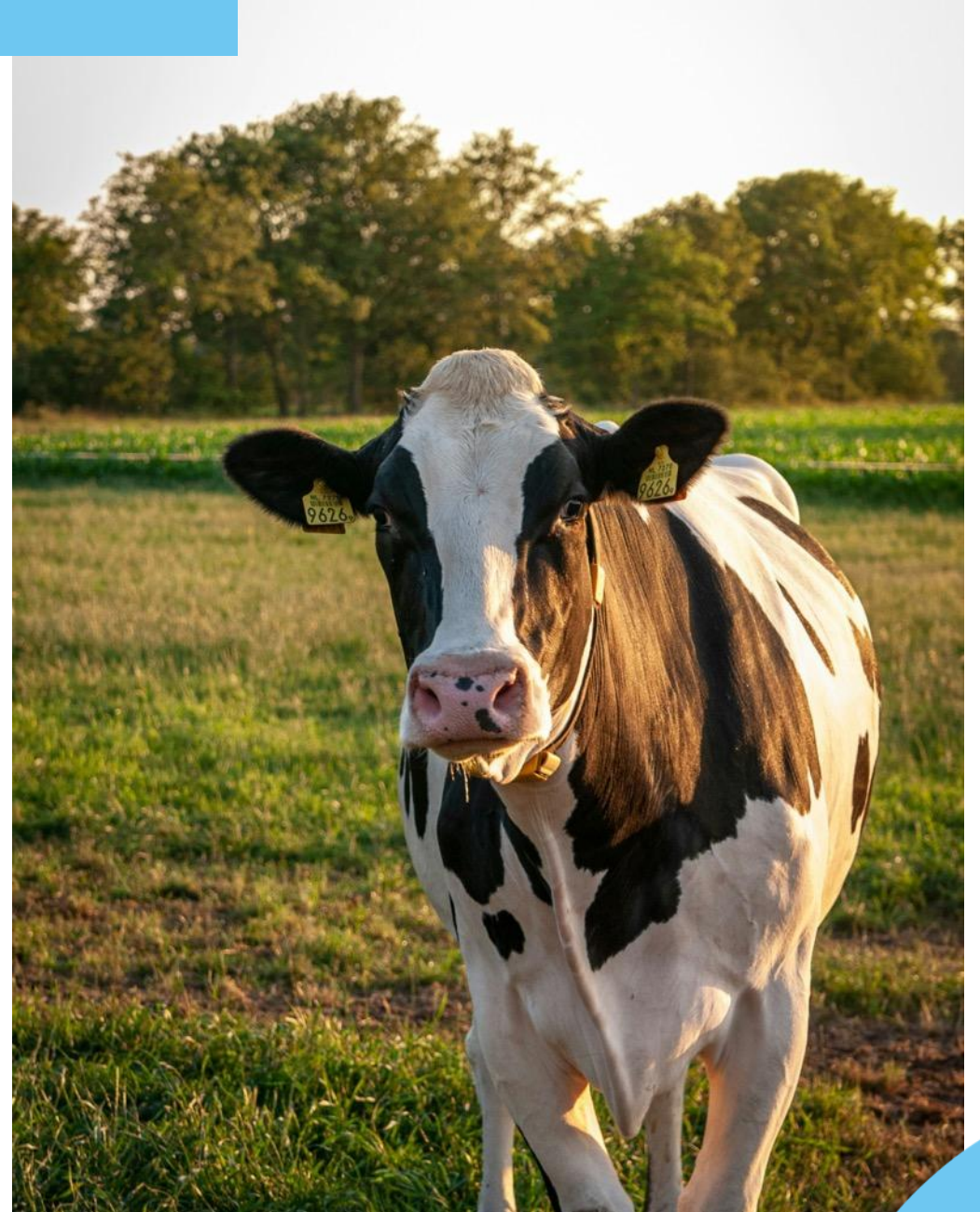
Origin of the project in 2019

- Economic viability of nature-inclusive farming and organic farming is questioned, although farmers did not recognize this themselves
- Farmers are facing with key decision moments: how do I run my business?
- Need for a standardized method that serves as a tool to compare different types of dairy farms



Goal of the project

- **A learning network** in which dairy farmers gain insight into the economic perspective of nature-inclusive dairy farming
- Gaining **insight into costs and benefits** of dairy farms in various stages of transition
- **Supporting decision makers** with quantitative evidence and recommendations to stimulate nature-inclusive farming



Publications & webinars

• Print

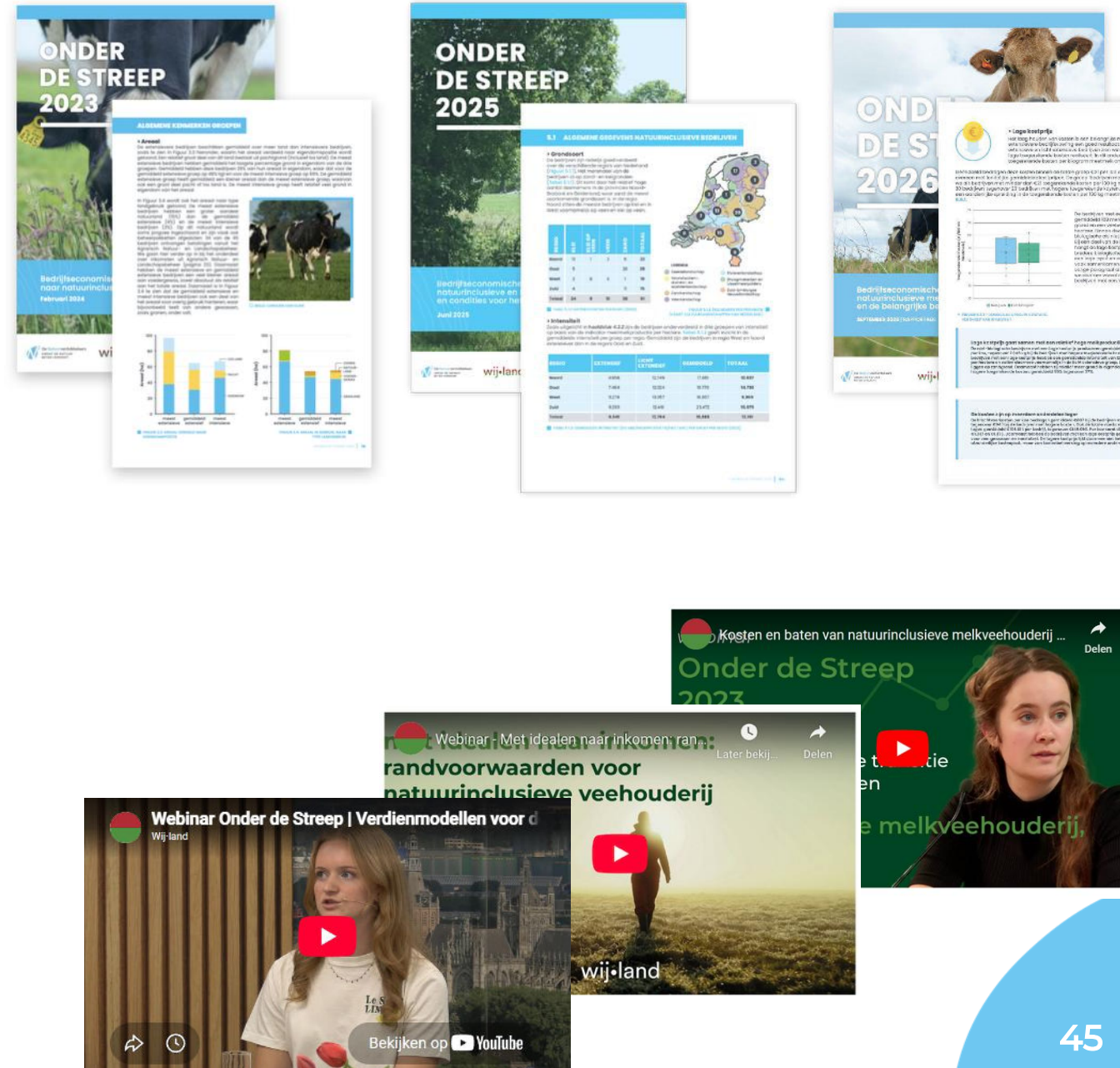
- Report [Onder de Streep 2021](#)
- Report [Onder de Streep 2023](#)
- Report [Onder de Streep 2025](#)
- Report [Onder de Streep 2026](#)

• Online

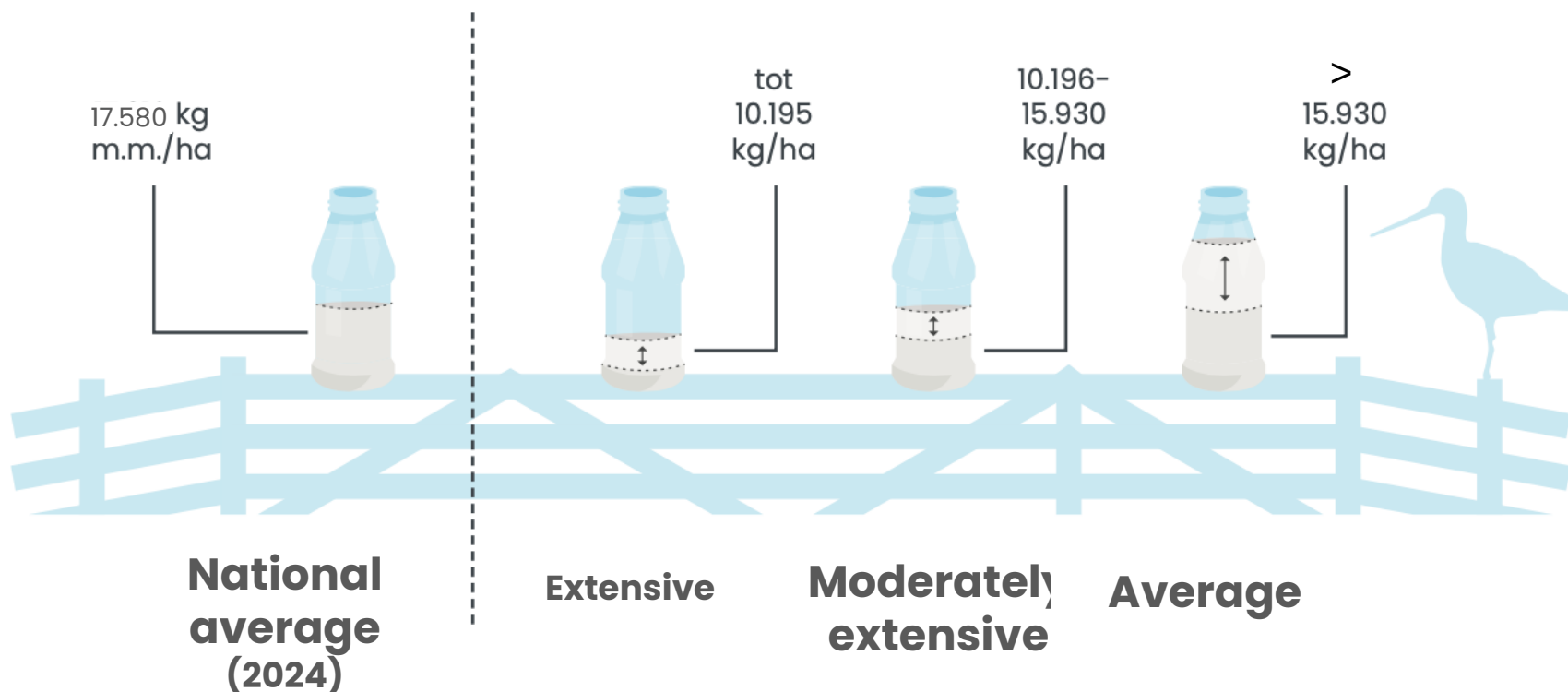
- [Webinar Onder de Streep 2021](#)
- [Webinar Onder de Streep 2023](#)
- [Webinar Onder de Streep 2025](#)
- [Webinar Onder de Streep 2025](#)

• Tools

- Monitoring tool V2.5 (incl. manual and methodology document)
- Business planning tool V0.99 (in development)

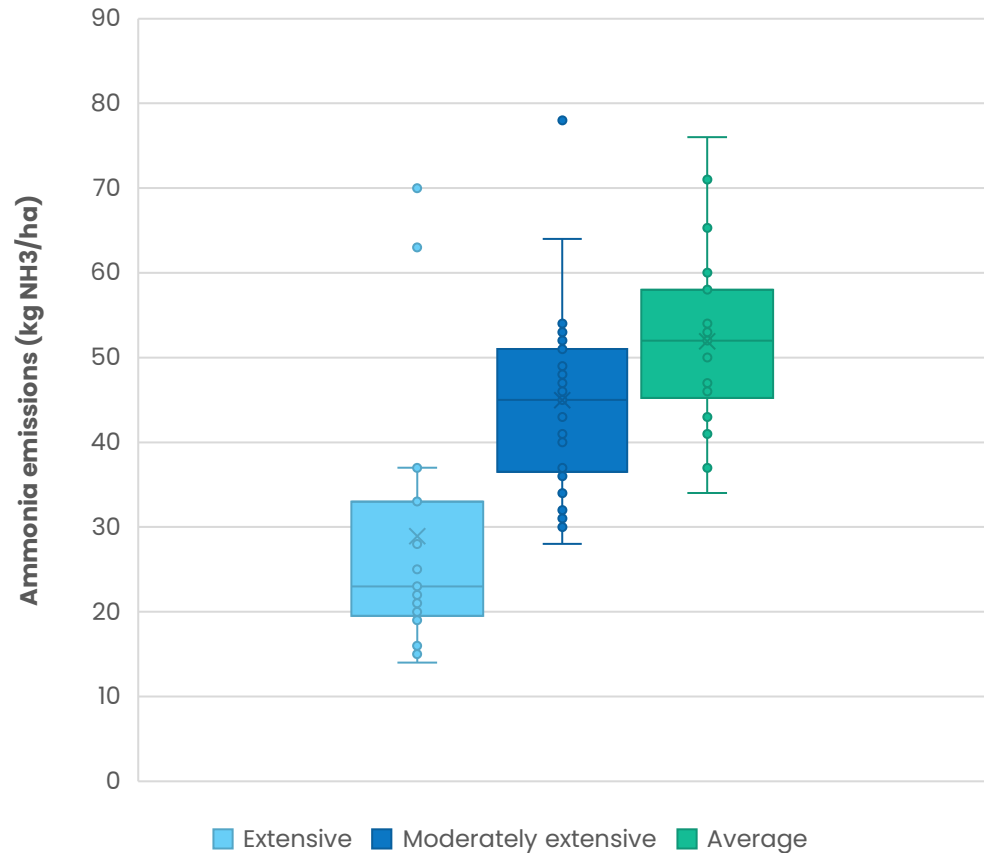


Grouping of participating farmers

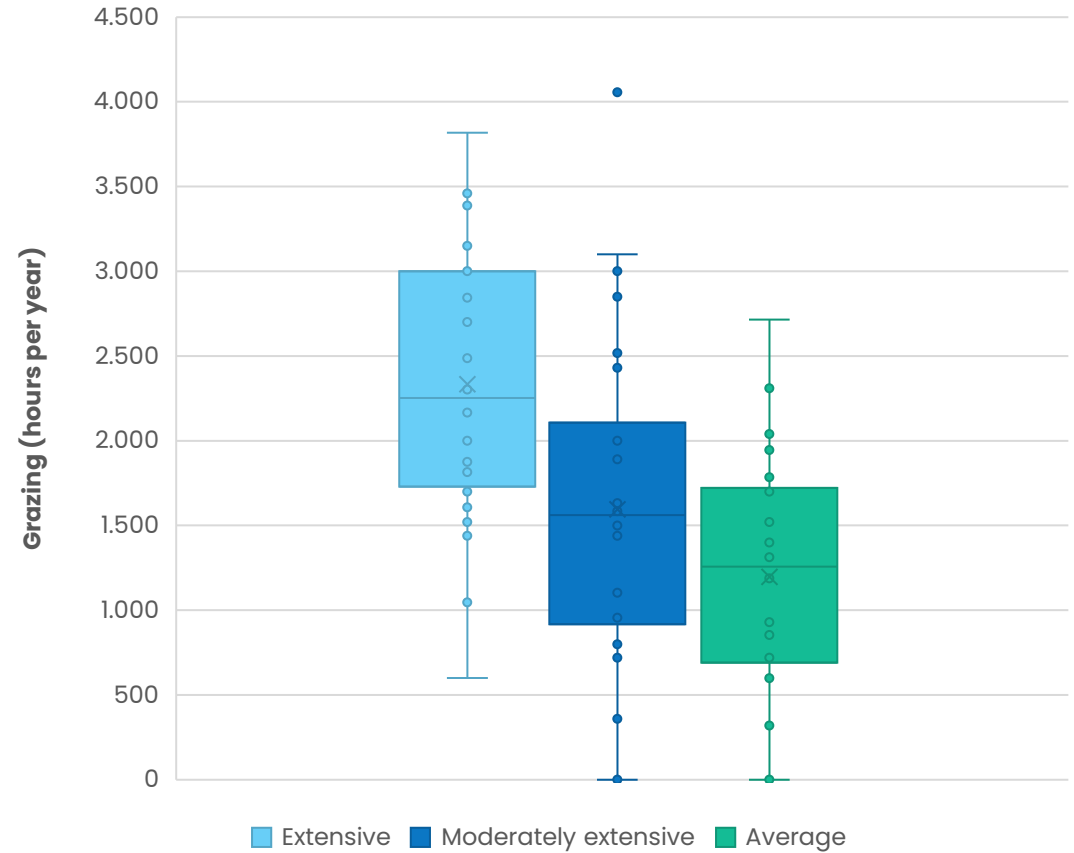


Performance on sustainability KPI's

Ammonia emissions per hectare (2024)

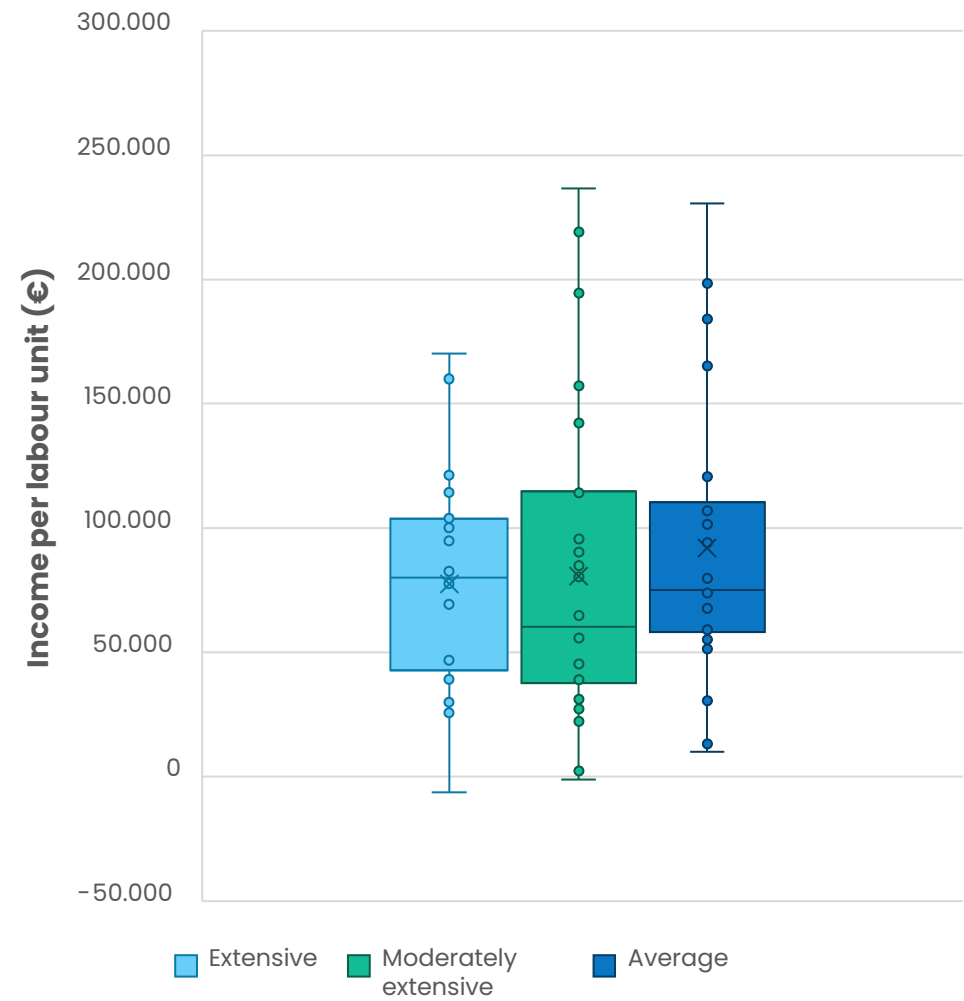


Grazing (2024)

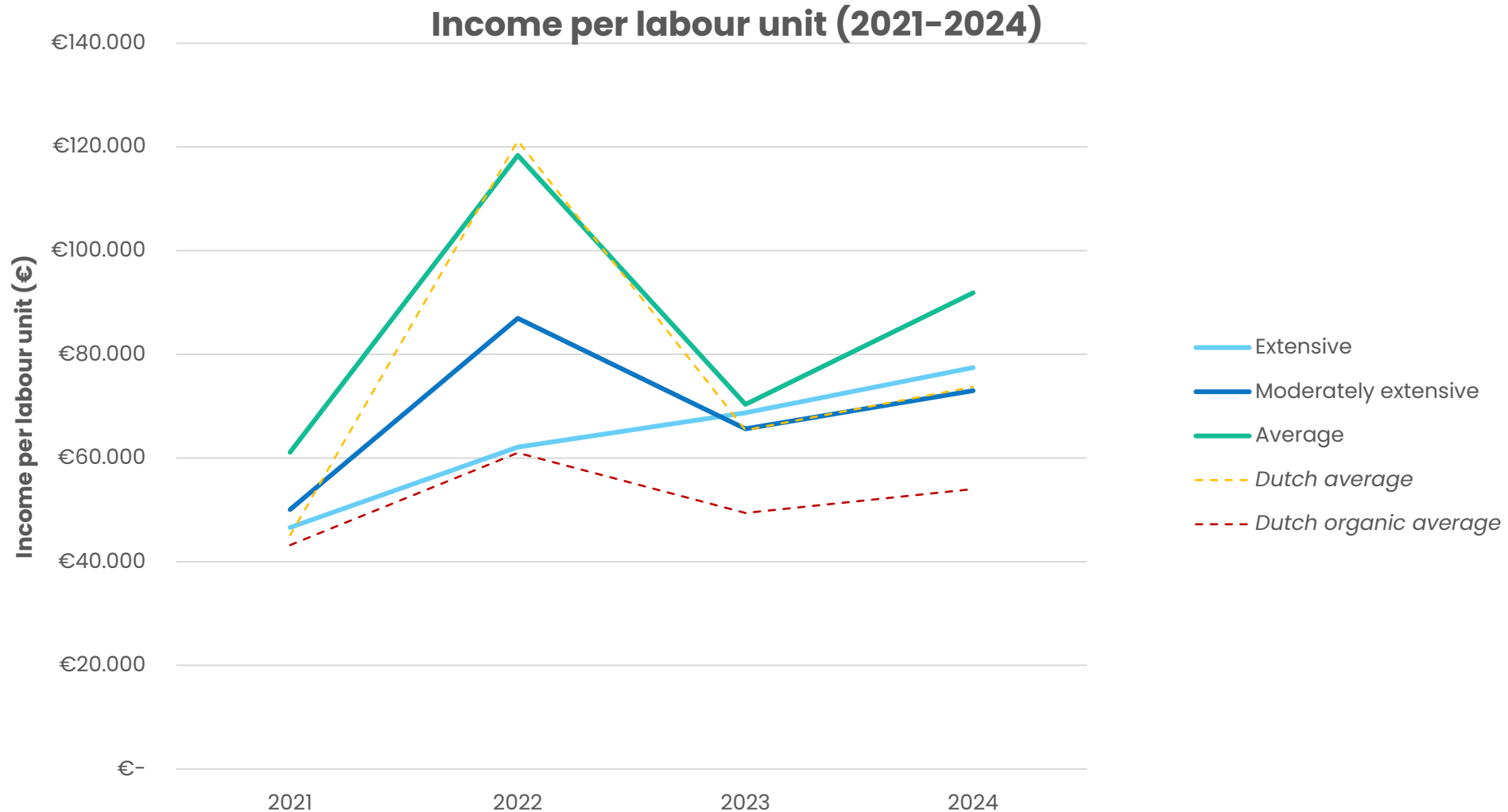


Distribution of income

Income per labour unit (2024)

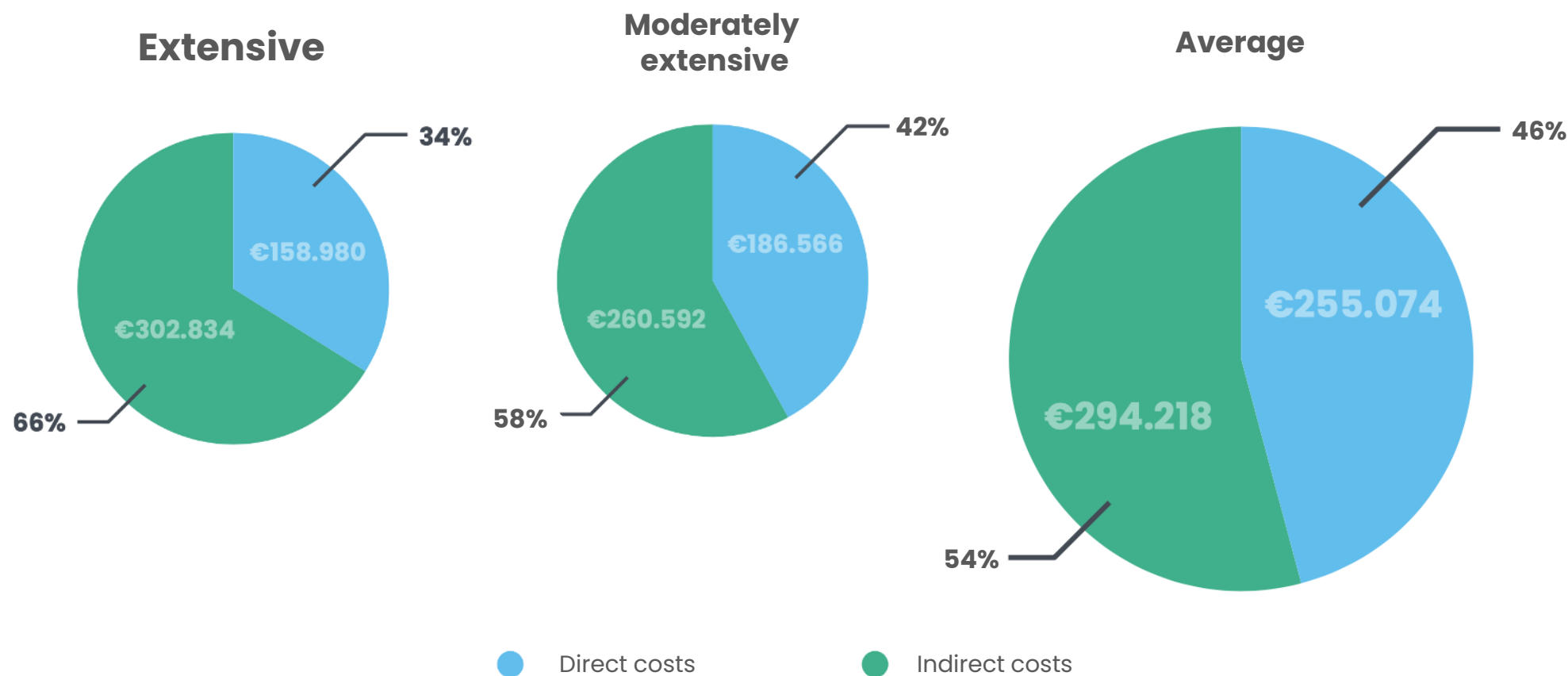


Profitability regenerative farms



Indirect costs

Distribution direct versus indirect costs



wij•land

BRABANTS
BODEM

PROJECT IN
VAN
GOGH
NATIONAAL
PARK

VK-OOST

Re•Ge•NL

naar rendabele
regeneratieve
landbouw



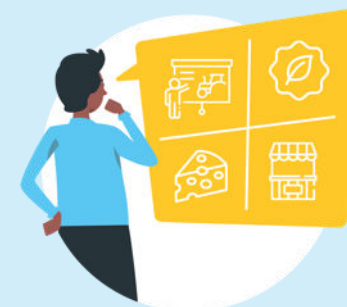
**Land affordability and
long-time access**

**Capturing societal
value and ecosystem
benefits**



Diversity in regions

**Diversification of
revenue streams**



**English
management
summary:**





PANEL DISCUSSION





FLOOR OPEN TO QUESTIONS



→ The Netherlands Pavilion Nature Finance Programme & Nature Finance Side Events at COP17

Week 1

Monday Oct 19	Tuesday Oct 20	Wednesday Oct 21	Thursday Oct 22	Friday Oct 23	Saturday Oct 24	Sunday Oct 25
Official side event: <i>Biodiversity financing for the implementation of the GBF: Results and lessons learned from the development of National Biodiversity Finance Plans</i> IUCN 13:15 – 14:45 Parz - Contact Group 4	Information flows to scale finance for biodiversity A-Track The Netherlands Pavilion Nature Finance Programme 11:15 – 12:15 From fragmentation to action: Mobilizing finance for locally-led conservation IUCN NL The Netherlands Pavilion Nature Finance Programme 14:15 – 15:15 Sizing the Cali Fund: revenue potential and the case for corporate participation LSE & GRI The Netherlands Pavilion Nature Finance Programme 16:45 – 17:45 Five ways to finance our oceans - from global to local UNDP BIOFIN The Netherlands Pavilion Nature Finance Programme 18:00 – 19:00	From Fragmented Instruments to Connected Infrastructure: Building EU's Nature Finance and Governance Landscape IUCN IMEC The Netherlands Pavilion Nature Finance Programme 13:00 – 14:00 Tracking Indicator D3 - How much does private finance contribute to biodiversity positive outcomes? FFB The Netherlands Pavilion Nature Finance Programme 15:30 – 16:30 Linking better biodiversity performance to economic feasibility: Measuring and Rewarding Biodiversity in Dairy International Dairy Federation The Netherlands Pavilion Nature Finance Programme 16:45 – 17:45	From Nature-based Solutions to Investable Water Landscapes: Using Ecosystem Service Valuation to Build Better Business Cases, Public-Private Partnerships and Water Resilience FSD The Netherlands Pavilion Nature Finance Programme 10:00 – 11:00 From screening to financial risk assessments: science-based approaches for biodiversity physical risk assessment in the banking sector Biolint The Netherlands Pavilion Nature Finance Programme 11:15 – 12:15 From Water Risk to Financial Resilience: Developing the Next Generation of Nature Stress Tests FSD The Netherlands Pavilion Nature Finance Programme 13:00 – 14:00 Unlocking Private Finance for Nature-based Solutions through the Value of Ecosystem Services Netherlands Enterprise Agency The Netherlands Pavilion Nature Finance Programme 15:30 – 16:30 From commitments to action: circular economy as a nature-positive finance opportunity Ellen MacArthur Foundation The Netherlands Pavilion Nature Finance Programme 16:45 – 17:45 Launching Recommendations to Scaling Nature in Transition Planning WWF International The Netherlands Pavilion Nature Finance Programme 18:00 – 19:00	Financing Urban Nature: New Tools for Cities Utrecht University The Netherlands Pavilion Nature Finance Programme 10:00 – 11:00 Mobilising Private Capital with Nature Biodiversity Credit Alliance The Netherlands Pavilion Nature Finance Programme 11:15 – 12:15 Official side event: Scaling Up Business Action for Biodiversity ISO Ljevan, GRULAC meeting room 13:15 – 14:45 Finance for Nature Positive Workshop FFB The Netherlands Pavilion Nature Finance Programme 14:15 – 15:15 NBFs in Practice: Early Lessons from NBF Development Nature^Squared The Netherlands Pavilion Nature Finance Programme 15:30 – 16:30 Nature in Sovereign Debt - A collective intelligence workshop to define priorities in public-private dialogue FFB The Netherlands Pavilion Nature Finance Programme 16:45 – 17:45	Government and FI experiences of implementing Target 14 of the Kunming-Montreal Global Biodiversity Framework DEFRA TNFD venue (green zone) 15:30 – 17:30	COP17 Nature Finance Reception Hosted by Triodos Bank & Nature^Squared Norq Garden Gallery 17:00 – 21:00 Registration through this link: nature-squared.typeform.com/COP17Reception or via this QR: 



Legend:

- L1: LEVEL 1
- FOOD
- TOILET
- CAFE
- STAIRS
- ELEVATOR
- DOOR
- ENTRANCE / EXIT

All sessions in orange take place in the The Netherlands Pavilion.

Take a look at the full programme →






→ The Netherlands Pavilion Nature Finance Programme & Nature Finance Side Events at COP17

Week 2

Monday Oct 26	Tuesday Oct 27	Wednesday Oct 28	Thursday Oct 29	Friday Oct 30
10:00 – 11:00 Drenthe's Natural Capital: From Value to Decisions Province of Drenthe 📍 The Netherlands Pavilion Nature Finance Programme	09:00 – 09:45 Financing Nature Through Business Operations, Turning everyday corporate investment into biodiversity, water and community outcomes Tandem Global 📍 The Netherlands Pavilion Nature Finance Programme	10:00 – 11:00 Understanding the user: matching biodiversity impact tools with private sector demands Naturalis Biodiversity Center 📍 The Netherlands Pavilion Nature Finance Programme	10:00 – 11:00 From Biodiversity Data to Decision-Useful Nature Intelligence Naturalis Biodiversity Center 📍 The Netherlands Pavilion Nature Finance Programme	11:15 – 12:15 Bridging global ambition and local action through place-based financing mechanisms Commonland 📍 The Netherlands Pavilion Nature Finance Programme
11:15 – 12:15 Building markets for nature finance: From Early-Stage Solutions to Scaled Investment FMO 📍 The Netherlands Pavilion Nature Finance Programme	10:00 – 11:00 Insurance Taking Action for Nature: Advancing risk evidence, finance and mainstreaming for nature UNDP 📍 The Netherlands Pavilion Nature Finance Programme	11:15 – 12:15 1% of GDP for Biodiversity Society for Conservation Biology European Region 📍 The Netherlands Pavilion Nature Finance Programme	11:15 – 12:15 IDFB (in person) - Nature Finance policy insights from COP17 IDFB 📍 The Netherlands Pavilion Nature Finance Programme	13:00 – 14:00 Reforming Biodiversity-Harmful Financial Flows: Accelerating Action Towards Target 18 – Open House Netherlands Enterprise Agency 📍 The Netherlands Pavilion Nature Finance Programme
13:00 – 14:00 Aligning the Economy with GBF Targets: Nature-Positive Transition Pathways, Economic Planning, and Enabling Policies WWF 📍 The Netherlands Pavilion Nature Finance Programme	11:15 – 12:15 From Santa Marta to Yerevan: What countries can learn from emerging fossil fuel phase-out roadmaps for climate and nature Triodos Bank 📍 The Netherlands Pavilion Nature Finance Programme	14:15 – 15:15 Restoring land, redirecting finance: Re-aligning financial flows to deliver nature positive outcomes Triodos Bank 📍 The Netherlands Pavilion Nature Finance Programme	13:00 – 14:00 Banks as enablers/disablers for mainstreaming biodiversity Naturalis Biodiversity Center 📍 The Netherlands Pavilion Nature Finance Programme	
16:45 – 17:45 From Biodiversity Ambition to Investment Reality: Lessons from DFCD FMO 📍 The Netherlands Pavilion Nature Finance Programme	15:30 – 16:30 The role of the finance sector in achieving the KMGBF goals and targets UNEP-WCMC 📍 The Netherlands Pavilion Nature Finance Programme	16:45 – 17:45 Reception at The Netherlands Pavilion Kingdom of the Netherlands 📍 The Netherlands Pavilion Nature Finance Programme	16:45 – 17:45 From Commitment to Capital: Unlocking Investment for Nature-positive Delivery Institutional Investors Group on Climate Change 📍 The Netherlands Pavilion Nature Finance Programme	
18:00 – 19:00 Reconnect Borneo: Financing Nature at Scale – From ambition to implementation WWF Netherlands 📍 The Netherlands Pavilion Nature Finance Programme	16:45 – 17:45 Financing the agricultural transition: overcoming barriers and unlocking solutions to achieve Target 10 of the Kunming-Montreal Global Biodiversity Framework Institut de la Finance Durable 📍 The Netherlands Pavilion Nature Finance Programme	18:15 Official side events: Reforming Biodiversity-Harmful Financial Flows: Accelerating Action Towards Target 18 Kingdom of the Netherlands 📍 Jermuk, African States meeting room	18:00 – 19:00 Financing Healthy Watersheds: Urban Nature-Based Solutions for Water, Biodiversity and Climate Resilience International Institute for Sustainable Development 📍 The Netherlands Pavilion Nature Finance Programme	
18:15 – 19:15 Official side event: From a to c: delivering on Target 19 through private finance "Moving to business unusual for biodiversity finance" Kingdom of the Netherlands 📍 Talin, Side-event Room 1	18:00 – 19:00 Calling for the successful establishment of the Tropical Forest Forever Facility - A demonstration of support from the signatories of the TFFF Rotterdam Statement of Support from Investors FFB 📍 The Netherlands Pavilion Nature Finance Programme	18:15 Involving the Finance Sector in Delivering NBSAPs: Nature-Positive Pathways, Transition Plans and Landscape Approaches as Practical Unlocks WWF 📍 Lastiver, Youth Group meeting room		

 **Nature^Squared**
CONNECTING ECOLOGY
AND ECONOMICS

IDFB
dialogue