



Brabantse Biodiversity Monitor Dairy farming (BBM)

Eurosite 8 november 2023

GROENER BOEREN
VERDIENT BETER.



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Supported by



Ministerie van Landbouw,
Natuur en Voedselkwaliteit

Ministry of Agriculture, Nature and Food Quality





**CASE: Brabants Biodiversity-
monitor dairyfarming (BBM),
nature-inclusive and more.**

Exploring new business models in partnership with government & markets & finance

Farmers are being rewarded for strengthening biodiversity on their farms by multiple stakeholders (governments, bank, dairy processor, land owner), based on an integrated set of Key Performance Indicators. National initiative & initiative North Brabant (Farmers, Brabants Landschap, BMF, waterautorities, province, Van Gogh NP/Brabants Bodem).

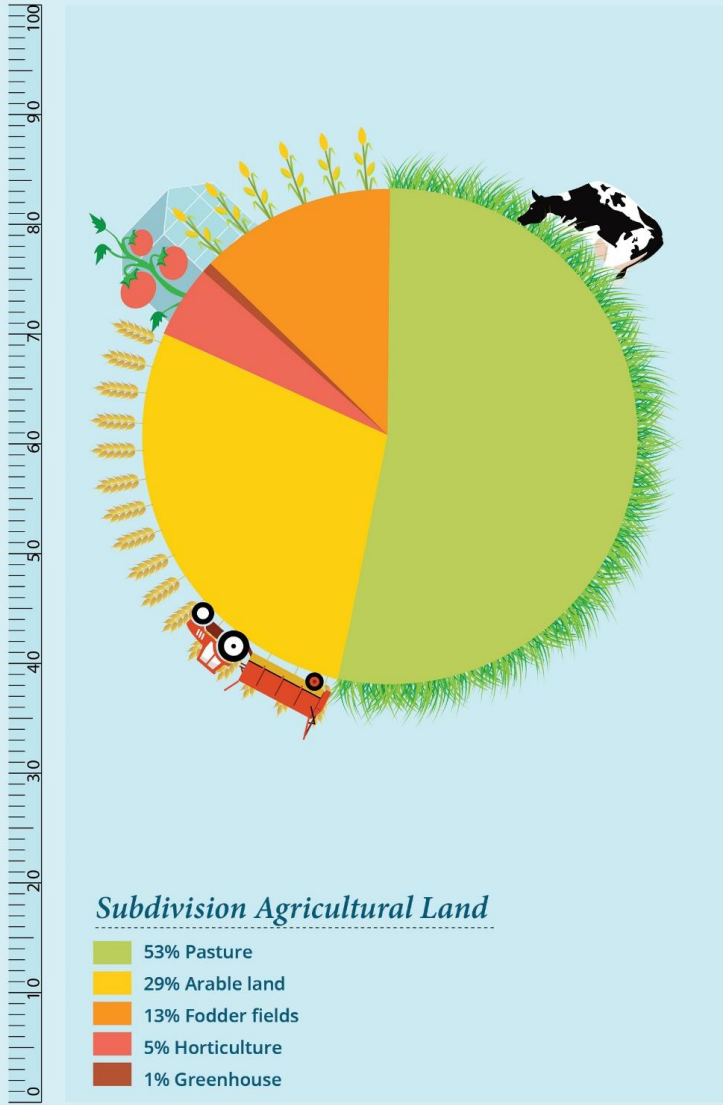


Dairy sector is largest user of land

LAND USE



Source: Centraal Bureau voor de Statistiek (2010)



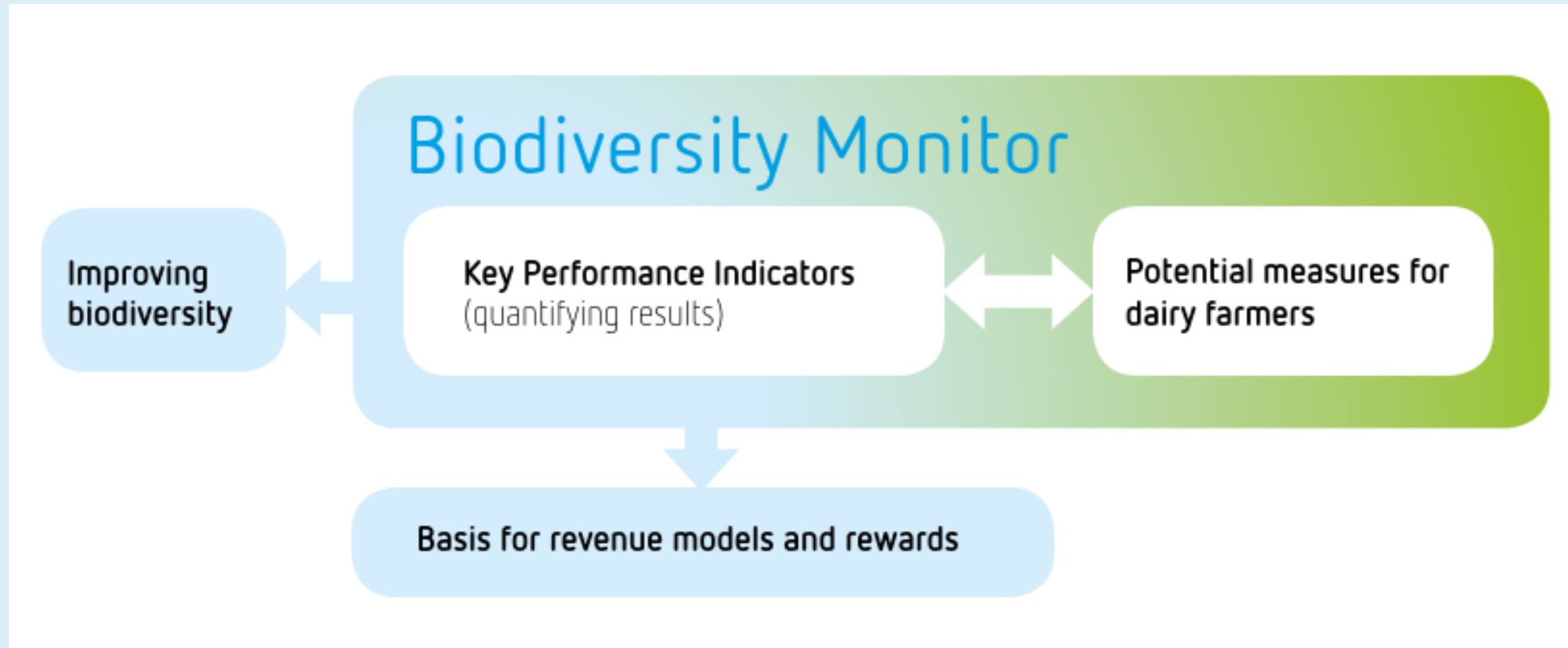
Why? Nature inclusive farming

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- It seems to be becoming more and more difficult to reconcile highly productive and efficient agriculture with nature conservation and the preservation of attractive landscapes in which people like to spend their leisure time.
- Brabant stable regulation (extra investment for farmers for ammonia reduction)
- Farmers are struggling with the conflicting claims.
- Variety of initiatives that aim at nature and landscape conservation, by farmers themselves, the government at various scales, by NGOs, by citizen volunteers and, increasingly, by other companies in agri-food chains.



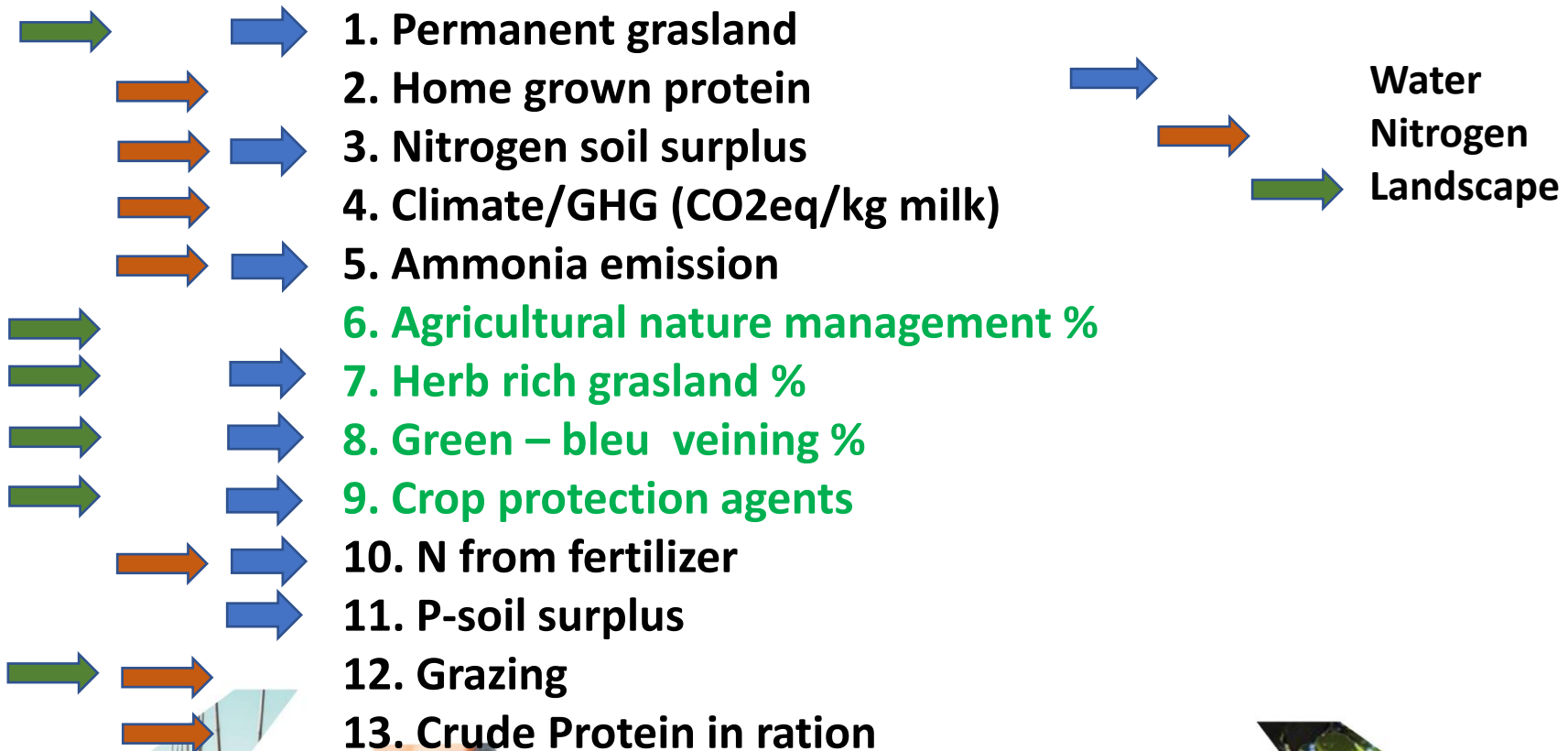
The Biodiversity Monitor



A set of thirteen Key Performance Indicators (KPI's)

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Rewards



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Biodiversiteitsmonitor VGNP		
Indicatoren	Doelen	Punten
% Blijvend grasland	$\geq 80\%$	200
	$\geq 70\%$	150
	$\geq 60\%$	100
	$\geq 50\%$	50

€ 1 per point, max 2.500 points

Bonus

>1500 points € 2.000

>2000 points € 2.500

Max annual reward: € 5.000



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Data
Dairy
Cycle
Guide
(9 KPI's)

Data Boeren-
natuur
(agricultural
collectives)
4 KPI's

1. Permanent grasland (%)
2. Home grown protein (%)
3. Nitrogen soil surplus (kg N/ha)
4. Climate/GHG (CO₂eq/kg milk)
5. Ammonia emission (kg NH₃/ha)
6. Agricultural nature management (%)
7. Herb rich grasland (%)
8. Green – bleu veining (%)
9. Crop protection agents
10. N from fertilizer (kg N/ha)
11. P-soil surplus (kg P₂O₅/ha)
12. Grazing (hours)
13. Crude Protein in ration (g RE/kg ds)



- Checks on data quality
- Score for each KPI
- Farmers Passport
- Benchmark



Dit is uw score over 2020

1400

op een totaal van 2500

Hoe is de score opgebouwd

Kringloopwijzer Indicatoren

#	Indicatoren	Resultaat	Punten
1	Percentage blijvend grasland (%)	67 %	100
2	Percentage eiwit van eigen land (%)	60 %	100
3	N-bodemoverschot (kg N/ha)	111 kg N/ha	100
4	Broeikasgasemissie (kg CO ₂ -eq/kg FPCM)	1001 g Co ₂ eq/kgFPCM	150
5	Ammoniakuitstoot (kg NH ₃ /ha)	47 kg NH ₃ /ha	150
6	Gebruik stikstofkunstmest (kg N/ha)	108 kg N/ha	50





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Stacking of rewards



Planet Proof, Foqus Planet,
etc: 4 cent / kg milk



Rabobank

Discount on loans:
0,2 %





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Stacking rewards

- BBM reward,
- CAP (Eco) reward
- Reward for agricultural nature and landscape management
- 4 ct higher milkprice Friesland Campina
- More chance lease land government
- Loan discount Rabobank 0,2 %
- > 1.000 punten 10 % discount ASR lease land
- Exempt low-emission housing (ammonia) when:
 - min 1.000 points BBM
 - max 2 Livestock Units (GVE)/ha
 - > 720 hours grazing



goal policy instead of means policy



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Long term: goal policy (KPI) instead of means policy

- Based on KPI's: national KPI-core set
- More integrated in Common Agricultural Policy (CAP) EU & Reward for agricultural nature and landscape management
- Higher rewards for:
 - Market (Planet Proof)/ consumers
 - Lease land
 - Permits
 - Carbon credits
 - Interest discount
 -





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Progress	Activity	# participating dairyfarmers
2020	Pilot group	55
2021	Development reward scheme to enable payments	190
	Set up implementing organization and digital backbone	
2022	Start monitoring	340
	Exempt for ammonia emission from stables	
2023	Duration reward 3 > 5 years	440
2024	Extra reward for young farmers & farmers in vulnerable areas: depending on growth in BBM score	600 – 650 ?





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Results / effects

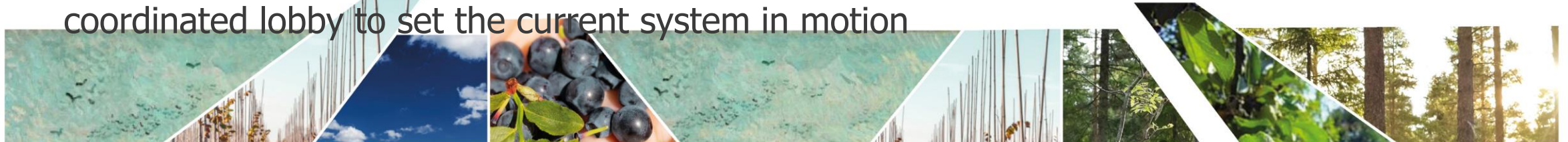
- Enthusiasm: farmers appreciate 'rewarding achievements' very much
- Farmers start rethinking and improving their practises
- Impulse in remodelling agricultural policy to more achievement driven





Barriers transition to Nature inclusive agriculture

- No concrete and broadly supported vision on nature-inclusive dairy farming and its aims;
- Lack of structural public & private rewarding of societal services
- Issues with stacking public rewards & EU rules state aid:
 - de minimis aid is maximized at 20.000 euro / 3 years
 - rewards are often based on means policy
 - EU support for rewards based on goal policy (KPI's)?
- Farmer financial freedom is limited by high debt / small margins
- The knowledge system is insufficiently attuned to the needs of farmers wanting to make the switch
- Change should come from within the sector, but so far there is no coordinated lobby to set the current system in motion





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Evaluation (2023)

	2020	2021	2022
Average score (BBM)	1142	1311	Not available
Average reward (per participant)	1504 euro	1942 euro	Not available





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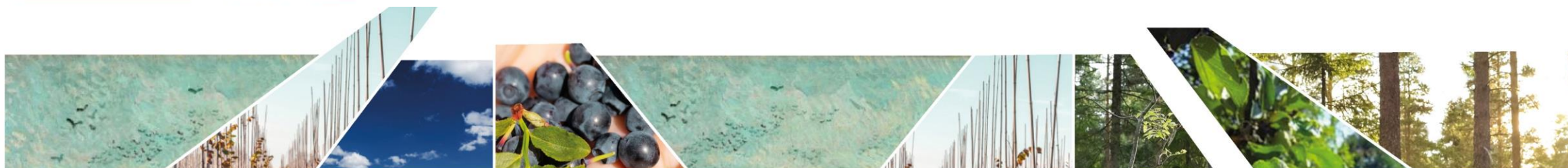
Monitoring

	2020	2021	2022
Average score (BBM)	1142	1311	Not available
Average reward (per participant)	1504 euro	1942 euro	Not available



Maasarend
Praktisch in ecologie

earthwatch
EUROPE





First results monitoring biodiversity (2023)

- 13 BBM KPI's focus on goals that **contribute** to biodiversity by **improving conditions**
- 4 'green' KPI's have positive effects on butterflies, breeding birds, earthworms
 - Agricultural nature management (%)
 - Herb rich grasland (%)
 - Green – bleu veining (%)
 - Crop protection agents

The principle behind the BBM is solid, rewarding these green goals indeed leads to rewarding greater biodiversity

- No clear relationship was found with the total KPI scores. No connection was found for butterflies, soil and water. For breeding birds there was only a weak connection.
- Farmers with a high total KPI score, do not necessarily achieve a higher return for the local soil and water quality and butterfly and breeding bird populations.
- The KPI's are not just for biodiversity, but for an integrated set of environmental goals.
- Most farmers have only a few years of experience with improving biodiversity
- More research in the future, also by farmers themselves.





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- [Zo werkt de Brabantse Biodiversiteitsmonitor Melkveehouderij - YouTube](#)

