

Agri-environmental measures for biodiversity conservation in Latvia: best practices and lessons learned from experiences so far

Solvita Rūsiņa¹, Andrejs Briedis²

¹ University of Latvia, ² Latvian Fund for Nature



GrassLIFE LIFE16NAT/LV/262
Zālāju atjaunošana un to dažādas
izmantošanas veicināšana

Best practices, lessons learned and future perspectives of agri-environmental measures for biodiversity conservation at the Boreal biogeographic region, Vilnius, Lithuania, 16-17 december, 2019

Presentation plan:

- Overview of the agri-environmental measures focussed on biodiversity conservation
- Grassland measures
- Lessons learned and best practices of agri-env. measures application in 2014-2020 and previous periods
- open questions/challenges



Presentation plan:

- Overview of the agri-environmental measures focussed on biodiversity conservation
- Grassland measures
- Lessons learned and best practices of agri-env. measures application in 2014-2020 and previous periods
- open questions/challenges



The conservation of biodiversity is supported through:

- 1) CAP greening,
- 2) Good Agricultural and Environmental Conditions (GAEC) instruments,
- 3) Latvian RDP under Priority 4A.

1) CAP greening

Crop diversification includes:

- Farms with less than 10 ha of arable land are exempted from the requirement
- For arable land between 10 and 30 ha – two crops are required (main crop no more than 75 per cent of arable land)
- For arable land more than 30 ha – 3threecrops are required (the two main crops together cannot account for more than 95 per cent).

Crop diversification with the current requirements **does not require substantial changes in usual practices**, with the exception of highly specialised large wheat-growing farms; **biodiversity considerations were of the least concern.**

1) CAP greening

Conserving 5% of Ecological Focus Areas (EFAs) in arable land:

- Fallow
- Buffer strips and field edges
- Areas with nitrogen-fixing crops (grain legumes)
- Summer crops with undersown grass
- Landscape features: field margins, groups of trees/field copses, ponds, protected trees, alleys, and boulders (the latter three are also GAEC elements)

EFA greening choices during the RDP 2014-2020 implementation
(Source: RSS; the area is provided with weighting coefficient)

EFA Greening option	2017, ha	2018, ha
“Forest” exemption	98 197	76 580
“Grassland” exemption	89 019	105 215
Fallow	44 185	37 310
N-fixing crops	60 035	19 903
Catch and cover crops	5 542	9 028
Landscape elements – trees, boulders	65	401
Landscape elements – buffer zones and field edges	980	1 732
Landscape elements – ponds	6.6	53
Landscape elements – protected trees and boulders, alleys	0.55	6
Landscape elements – ditches	-	2 771

1) CAP greening

Maintaining permanent grassland:

- In 2018, 17,567 ha of permanent grassland was designated as Environmentally Sensitive Permanent Grasslands (ESPGs)
- Currently, all grassland habitat types (1630 *, 6120 *, 6210, 6230 *, 6270 *, 6410, 6510, 6530*) and bird habitats in and outside Natura 2000 sites are designated as ESPGs
- Consequently, no biologically valuable types of grassland are excluded from the ESPG designation. They represent nearly 100 per cent of the areas of these grasslands in field blocks.
- New grassland areas are continuously added to ESPGs in synergy with the ongoing Nature Census project

Designation of ESPGs has protected EU importance grassland habitats from conversion to arable land, particularly in fertile soils where the risk of conversion is higher.

460 ha mapped as EU grassland habitats **have been ploughed** between mapping and inclusion in the ESPG layer of the RSS information system since 2015 (NCA, personal comm.)

ESPGs of organic farms are not protected from ploughing. If the grassland is converted to arable land but the organic certification continues on this land, there is no requirement to restore the grassland, as organic farms are exempt from the greening measures. No statistical data are available on the ploughed areas of such type

If a grassland is ploughed after it has been included in the RSS system as ESPG, the farmer is obliged to restore the grassland. According to NCA data provided for this case study, **287 ha** of EU importance grasslands **have been ploughed** since 2015 (NCA, personal comm.).

The current CAP implementation in its design, targeting and budget allocation for biodiversity measures is very similar to the previous programming period (2007-2013). The most significant changes that have occurred are:

- Abandonment of Compensation payment for Natura 2000 agriculture areas (M12.1) (possible negative impact on grassland maintenance in Natura 2000 areas);
- Introduction of a new measure *Establishment of a sparing environment for growing plants for nectar* (M10.1.4) (low uptake, so no significant impact);
- Compulsory training for beneficiaries of *Maintenance of biological diversity in grasslands* (M10.1.1) (positive impact)
- Differentiation of payment rates for M12.2 *Compensation payment for Natura 2000 forest areas* (positive impact), and M10.1.1 (potentially positive impact, but less influential in real life because of the very high share of grasslands only eligible for the basic reduced rate).

The conservation of biodiversity is supported through:

- 1) CAP greening,
- 2) Good Agricultural and Environmental Conditions (GAEC) instruments,
- 3) **Latvian RDP under Priority 4A.**

Relevant RDP sub-measures programmed and implemented in Latvia include:

- Support for vocational training and skills acquisition actions (M01.1)
- Support for demonstration activities and information actions (M01.2)
- Support for short-term farm and forest management experience exchange as well as farm and forest visits (M01.3);
- Support to help benefiting from the use of advisory services (M02.1);
- Support for afforestation/creation of woodland (M08.1);
- Support for investments improving the resilience and environmental value of forest ecosystems (M08.5);
- Compensation payment for Natura 2000 forest areas (M12.2);
- Maintenance of biological diversity in grasslands (M10.1.1);
- Promotion of integrated horticulture (M10.1.2);
- Stubble field in winter period (M10.1.3);
- Establishment of a sparing environment for growing plants for nectar (M10.1.4);
- Conversion to organic farming (M11.1);
- Maintenance of organic farming (M11.2);
- Compensation payments for areas affected by natural constraints [agriculture] (M13.2); and
- Compensation payments for other areas affected by specific constraints [agriculture] (M13.3).

**Knowledge transfer
Advisory**

Forests

Agri-environment

Organic farming

Less-favourable areas

Budgetary allocation in two RDP programming periods (figures for RDP 2007-2013 from Institute of Agricultural Resources and Economics, 2016; RDP 2014-2020 from Ministry of Agriculture, 2018).

	CAP measure	RDP 2007-2013 (13.11.2015)	RDP 2014-2020 (02.10.2018)
	Total amount for RDP	1 361 646 323	1 531 595 209
Forests 2%	M8.1 Support for afforestation/creation of woodland	16 238 770 (1.2%)	6 460 103 (0.4%)
	M8.5 Support for investments improving the resilience and environmental value of forest ecosystems	15 423 332 (1.1%)	24 843 077 (1.6%)
	M12.2 Compensation payment for Natura 2000 forest areas	9 174 255 (0.7%)	24 093 714 (1.7%)
Agri-environment 5.5%	M10 Agri-environment and climate	196 764 380 (14.2%) (M10+M11)	83 789 619 (5.5%)
	M10.1.1 Maintenance of biological diversity in grasslands	No data	18 702 670 (1.2%)
	M10.1.2 Promotion of integrated horticulture	No data	7 114 360 (0.5%)
	M10.1.3 Stubble field in winter period	No data	57 472 589 (3.8%)
	M10.1.4 Establishment of a sparing environment for growing plants for nectar	-	500 000 (0.03%)
Organic farming 12.8%	M11 Organic farming	No data	194 279 325 (12.8%)
	M12.1 Compensation payment for Natura 2000 agriculture areas	17 968 489 (1.3%)	-
Less-favourable areas 18.5%	M13.2 Compensation payments for areas affected by natural constraints	279 555 991 (20.2%)	254 124 905 (16.9%)
	M13.3 Compensation payments for other areas affected by specific constraints		4 797 210 (1.6%)

Summary of uptake by beneficiaries (Source: RSS)

	CAP measure	Target area, ha	Supported area, ha in 2018 (% of the target area in brackets)
Forests	M8.1 Support for afforestation/creation of woodland	4000	8 478 (212%)
	M8.5 Support for investments improving the resilience and environmental value of forest ecosystems	31 000	21 497 (69%)
	M12.2 Compensation payment for Natura 2000 forest areas	40 000	44 396 (111%)
Agri-environment	M10 Agri-environment and climate	190 000	117 518 (62%)
	M10.1.1 Maintenance of biological diversity in grasslands	47 000	37 028 (78.8%)
	M10.1.2 Promotion of integrated horticulture	3 000	6 400 (213%)
	M10.1.3 Stubble field in winter period	130 000	110 138 (85%)
	M10.1.4 Establishment of a sparing environment for growing plants for nectar	10 000	943(9.4%)
Organic farming	M11.1 Conversion to Organic farming	20 000	5 329 (27%)
	M11.2 Maintenance of Organic farming	185 000	256 746 (139%)
Less-favourable areas	M13.2 Compensation payments for areas affected by natural constraints	1 232 650	1 507 112 (122%)
	M13.3 Compensation payments for other areas affected by specific constraints	64 850	59 464 (92%)

<2% of UAA

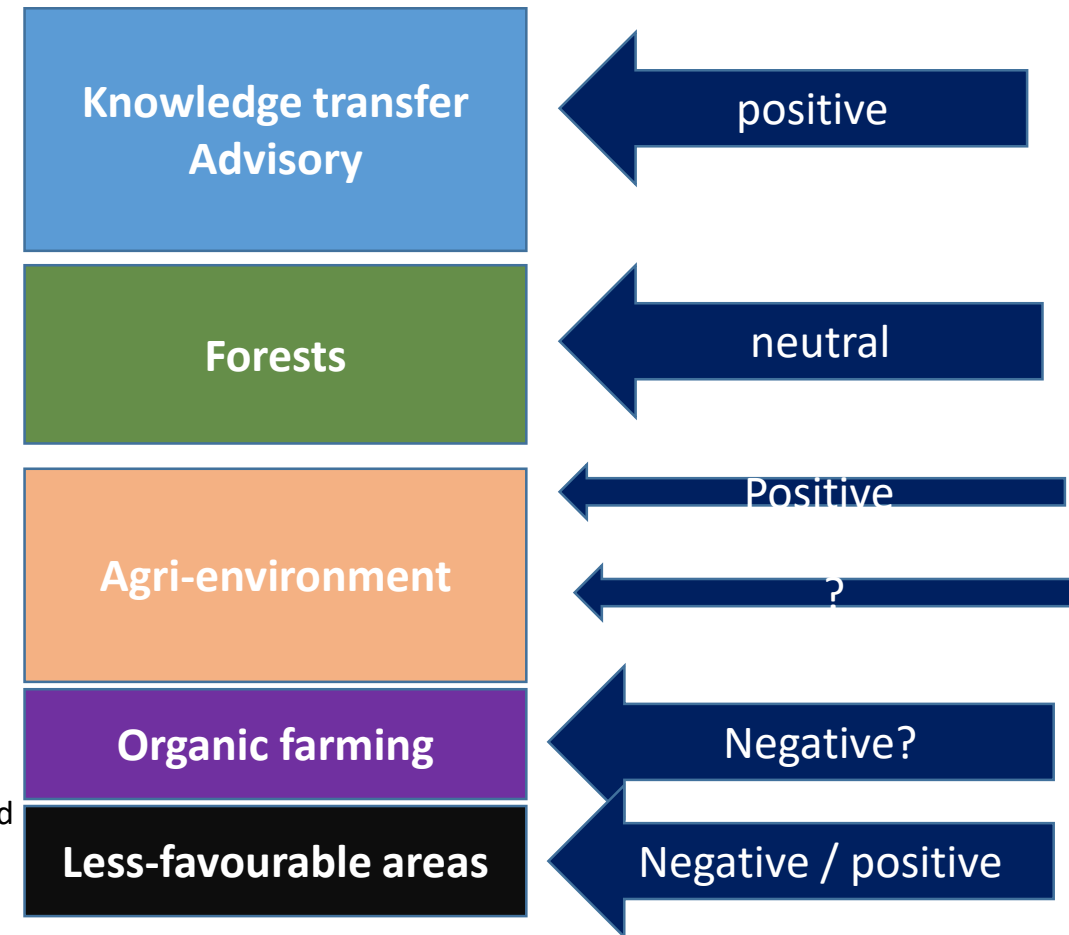
Presentation plan:

- Overview of the agri-environmental measures focussed on biodiversity conservation
- Grassland measures
- lessons learned and best practices of agri-env. measures application in 2014-2020 and previous periods
- open questions/challenges



Biodiversity in grasslands

- Support for vocational training and skills acquisition actions (M01.1)
- Support for demonstration activities and information actions (M01.2)
- Support for short-term farm and forest management experience exchange as well as farm and forest visits (M01.3);
- Support to help benefiting from the use of advisory services (M02.1);
- Support for afforestation/creation of woodland (M08.1);
- Support for investments improving the resilience and environmental value of forest ecosystems (M08.5);
- Compensation payment for Natura 2000 forest areas (M12.2);
- Maintenance of biological diversity in grasslands (M10.1.1);
- Promotion of integrated horticulture (M10.1.2);
- Stubble field in winter period (M10.1.3);
- Establishment of a sparing environment for growing plants for nectar (M10.1.4);
- Conversion to organic farming (M11.1);
- Maintenance of organic farming (M11.2);
- Compensation payments for areas affected by natural constraints [agriculture] (M13.2); and
- Compensation payments for other areas affected by specific constraints [agriculture] (M13.3).



One agri-env measure:

Maintenance of biodiversity in grasslands

Latvia

MAINTAINING BIODIVERSITY IN GRASSLANDS

- All semi-natural grasslands, including wooded pastures (**not 9070, not 6430**), but **6100**
 - Higher support level for less productive habitat types.
 - This scheme includes also other habitats important to biodiversity and landscape, not only semi-natural grasslands (2130, 2330, 2320, 2190, 4010, 4030, 7230)
-

Latvia	
Budget and target area	31 000 000 EUR for 47 000 ha (659 Eur/ha/period)
Total area at present	70 000 ha (47 000 ha (EU habitats) + 25 000 ha bird habitats (incl. sown grasslands)). <i>50 % managed</i>
Favourable reference area	130 000 ha
Eligible area	EU importance semi-natural grassland habitats in whole area of Latvia
Min eligible area per farm	1 ha (each parcel not less than 0,3 ha)

Latvia

Eligibility criteria for
grassland

- In good condition
- EU importance habitat in agricultural land (1.-3rd categ.)
- EU importance habitat outside agricultural land (4th categ.)
- Mowing 1 x year with hay removal by 15 Sept. (no mowing time)
- Or grazing with no more than 0.9 cattle units per ha (15.05-15.09). If not grazed properly, than mowing, no hay removal
- Do not disturb soil, no cultivation
- 16 hour courses
- Management diary

Support rate

0 category – 55 EUR

1st category 6510, 6270-1, 6450-1, 6450-2	Sown grassland	Semi-natural grassland
Management costs, ha	229 EUR (2x mowing, fertiliser, hay removal)	86 EUR (1 x mowing, hay removal)
Income for hay, ha	390 EUR (6 t/ha)	195 EUR (3 t/ha)
Pure income, ha	166 EUR	109 EUR
Difference in pure income, ha		- 57 EUR (83 EUR because of %
2nd category 6270-2, 6270-3	Sown grassland	Semi-natural grassland
Management costs, ha	229 EUR (2x mowing, fertiliser, hay removal)	86 EUR (1 x mowing, hay removal)
Income for hay, ha	390 EUR (6 t/ha)	97 EUR (1,5 t/ha)
Pure income, ha	166 EUR	11,50 EUR
Difference in pure income, ha		- 155 EUR
3rd category 6120, 6210, 6410, 6230, 6530, 5130	Sown grassland	Semi-natural grassland
Management costs, ha	229 EUR (2x mowing, fertiliser, hay removal)	86 EUR (1 x mowing, hay removal)
Income for hay, ha	390 EUR (6 t/ha)	46 EUR (0.7 t/ha)
Pure income, ha	166 EUR	- 40 EUR
Difference in pure income, ha		- 206 EUR

3rd category

1630*_1; 4030_3; 2330_2; 2320_3;
2190_2; 2130*_4;
5130*_3;
6110*_3;
6120*_1; 6120*_2; 6120*_3;
6210_1; 6210_2; 6210_3; 6210_4;
7230_3;
6230*_1; 6230*_2; 6230*_3;
6410_1; 6410_2; 6410_3; 6410_4;
6530*_1; 6530*_2

4th category	Sown grassland	Semi-natural grassland
Management costs, ha	229 EUR (2x mowing, fertiliser, hay removal)	86 EUR (1 x mowing, hay removal)
Income for hay, ha	390 EUR (6 t/ha)	46 EUR (0.7 t/ha)
Pure income, ha	166 EUR	- 40 EUR
<u>Direct payments</u>	124 EUR	0 EUR
Difference in pure income+direct payments, ha		- 330 EUR

1630*_2;
 6100; 6110*_1; 6110*_2;
 6230*_4;
 2130*_1; 2130*_2; 2130*_3;
 2190_1; 6410_5;
 2320_1; 2320_2;
 2330_1;
 4010_1; 4010_2;
 4030_1; 4030_2;
 5130*_1; 5130*_2;
 6530*_3; 6450_4;
 7230_1; 7230_2

Comparison of payment rates between RDP 2007-2013 and RDP 2014-2020

Payment category	Grassland supported by M10.1.1 EUR ha ⁻¹		Grassland supported M11 EUR ha ⁻¹	
	2007-2013	2014-2020	2007-2013	2014-2020
Single area payment (SAP)	86	77	86	77
Greening	-	44	-	44
Coupled support (for 2007-2013)	-	-	-	-
Natura 2000 for agriculture (M12.1)	44	-	44	-
Maintenance of biological diversity in grasslands (M10.1.1) (one payment category in 2007-2013, and five categories in 2014-2020)	123	55/83/155/206/330 (the later not eligible for SAP)	Not eligible	Not eligible
Stubble field in winter period (M10.1.3)	-	-	-	-
Organic farming (M11)	Not eligible	Not eligible	138 (only with <0.3 cattle units)	97 (only with <0.3 cattle units)
Compensation payments natural constraints (M13) (four payment categories)	25/40/58 (only with <0.3 cattle units)	25/35/45/50 (only with <0.3 cattle units)	25/40/58 (only with <0.3 cattle units)	25/35/45/50 (only with <0.3 cattle units)
Min payment per ha	209	176	224	218
Max payment per ha	311	377	326	268

Introduction to important regulations e.g. possibilities to overlap/combine the measures and payments, compliance with GAEC standards

2014-2020	2021-
No Natura 2000 payment for grasslands	Under discussion (one possibility to support permanent grasslands that are not EU habitats but with a potential to increase biodiversity)
Grasslands and other semi-natural habitats not fulfilling GAEC but eligible for grassland measure MBG (BDUZ) has higher rate compensating unreceived direct payments (4th class)	Most probably will be continued
Grasslands complying with GAEC receive direct payments	Grasslands complying with GAEC receive direct payments
Organic Farming payment for grassland cannot overlap with MBG (BDUZ)	Under discussion One possibility – no support from RDP but supported by Eco-schemes EU grassland habitats and bird grasslands – management should follow MBG rules, eligible to receive MBG support

Presentation plan:

- Overview of the agri-environmental measures focussed on biodiversity conservation
- Grassland measures
- Lessons learned and best practices of agri-env. measures application in 2014-2020 and previous periods
- open questions/challenges



Good practices

Eligibility outside Natura 2000

Higher support rate for the most valuable sites

Registered NGOs are eligible to get the support

Training for farmers initiates more motivation to manage and increase value of habitats in eyes of farmers

No mowing date increased uptake of the support and less negative attitude

Differentiation of the support increased interest of farmers to uptake the scheme

Cooperation between Rural Advisory Center and Nature Conservation Agency – increased cooperation and distribution of responsibilities
increased understanding and dialogue between institutions

Management plans – activities for improvement of grassland conservation status that potentially violate rules for receiving subsidies
Support is maintained

Conservation status improvements from 2007-2013 to 2014-2020 – MBG measure

<u>Indicator</u>	<u>Botanical diversity</u>		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Dominance of expansive species, % of grassland area</u>	>50%*	20-50%	<20%
2007–2013	26	19	54
2014–2020	17	15	68
<u>SNG Indicator species abundant (% of total area)</u>	<20%	20-80%	>80%
2007–2013	71	12	17
2014–2020	47	30	23
<u>NUmber of SNG ID species in grassland</u>	<5 species	5-9 species	>9 species
2007–2013	61	28	11
2014–2020	45	33	21
<u>Number of species 1m2</u>	<20 species	20-30 species	>30 species
2007–2013	74	24	2
2014–2020	64	34	2

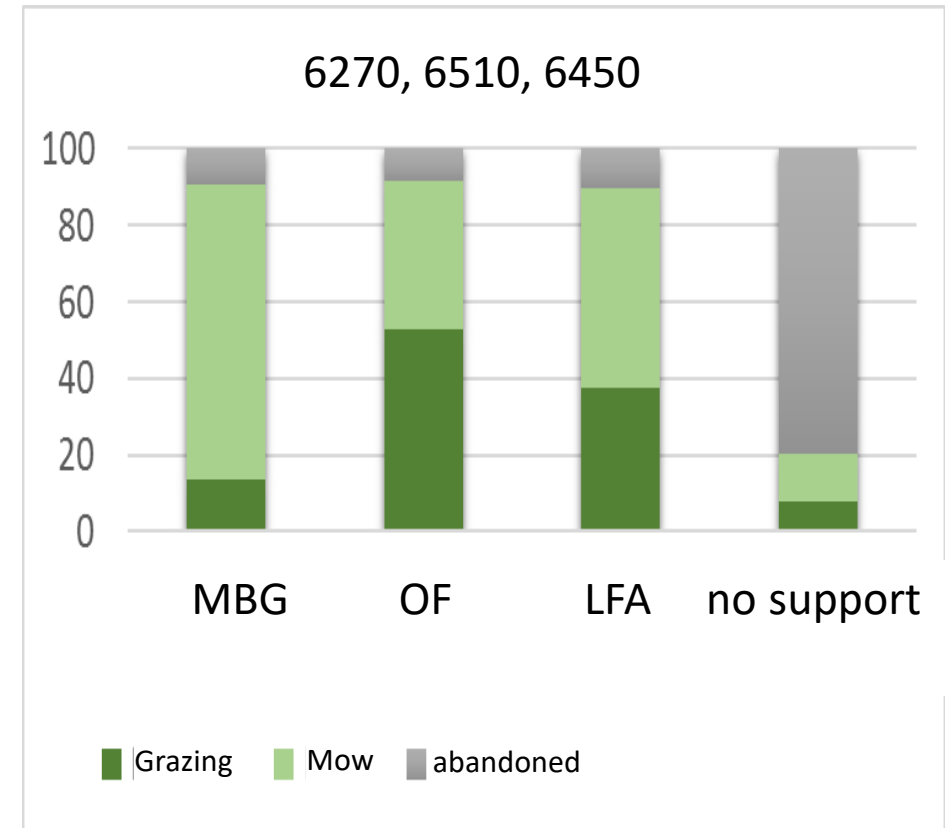
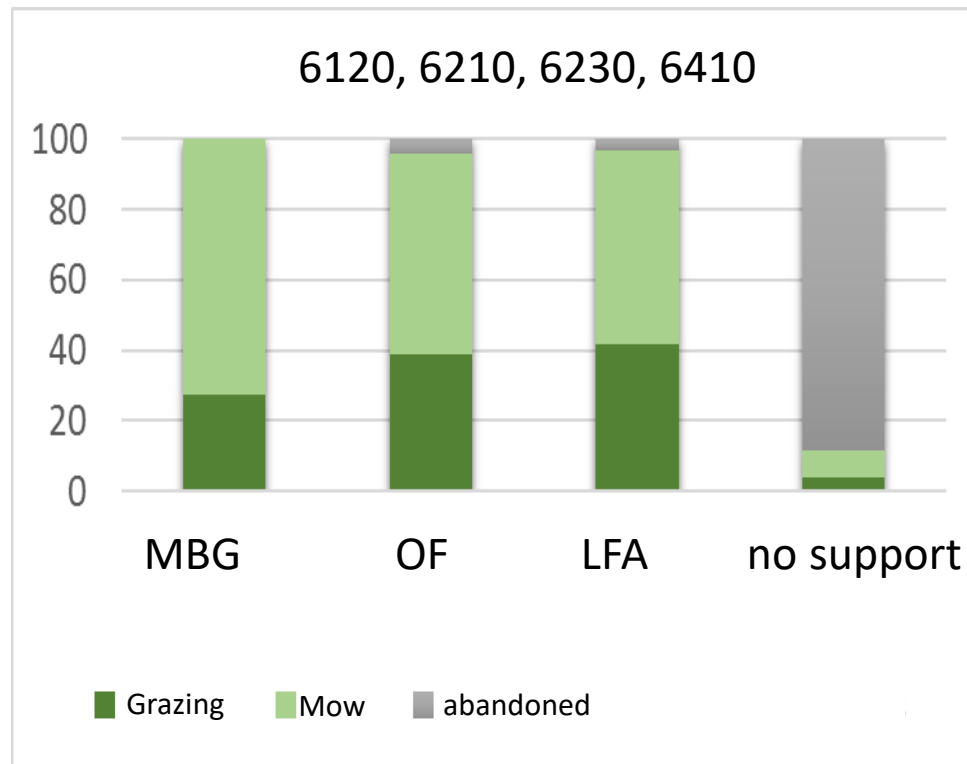
(AREI, 2019)

Conservation status improvements from 2007-2013 to 2014-2020 – Organic farming

Indicator	Botanical diversity		
	Low	Medium	High
Dominance of expansive species, % of grassland area	>50%*	20-50%	<20%
2007–2013	65	22	13
2014–2020	6	10	84
SNG Indicator species abundant (% of total area)	<20%	20-80%	>80%
2007–2013	14	28	58
2014–2020	35	42	22
Number of SNG ID species in grassland	<5 species	5-9 species	>9 species
2007–2013	20	55	25
2014–2020	40	42	18
Number of species 1m2	<20 species	20-30 species	>30 species
2007–2013	35	58	7
2014–2020	55	45	0

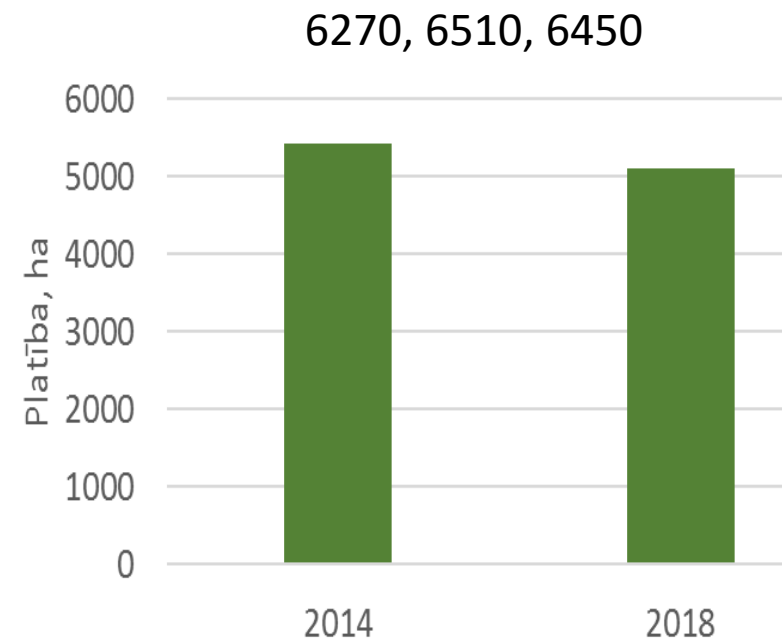
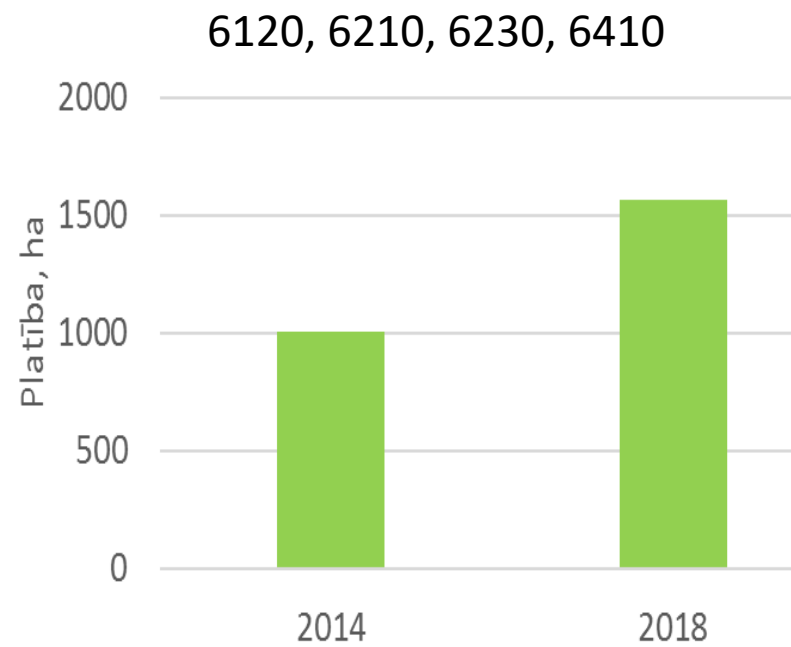
(AREI, 2019)

Management type

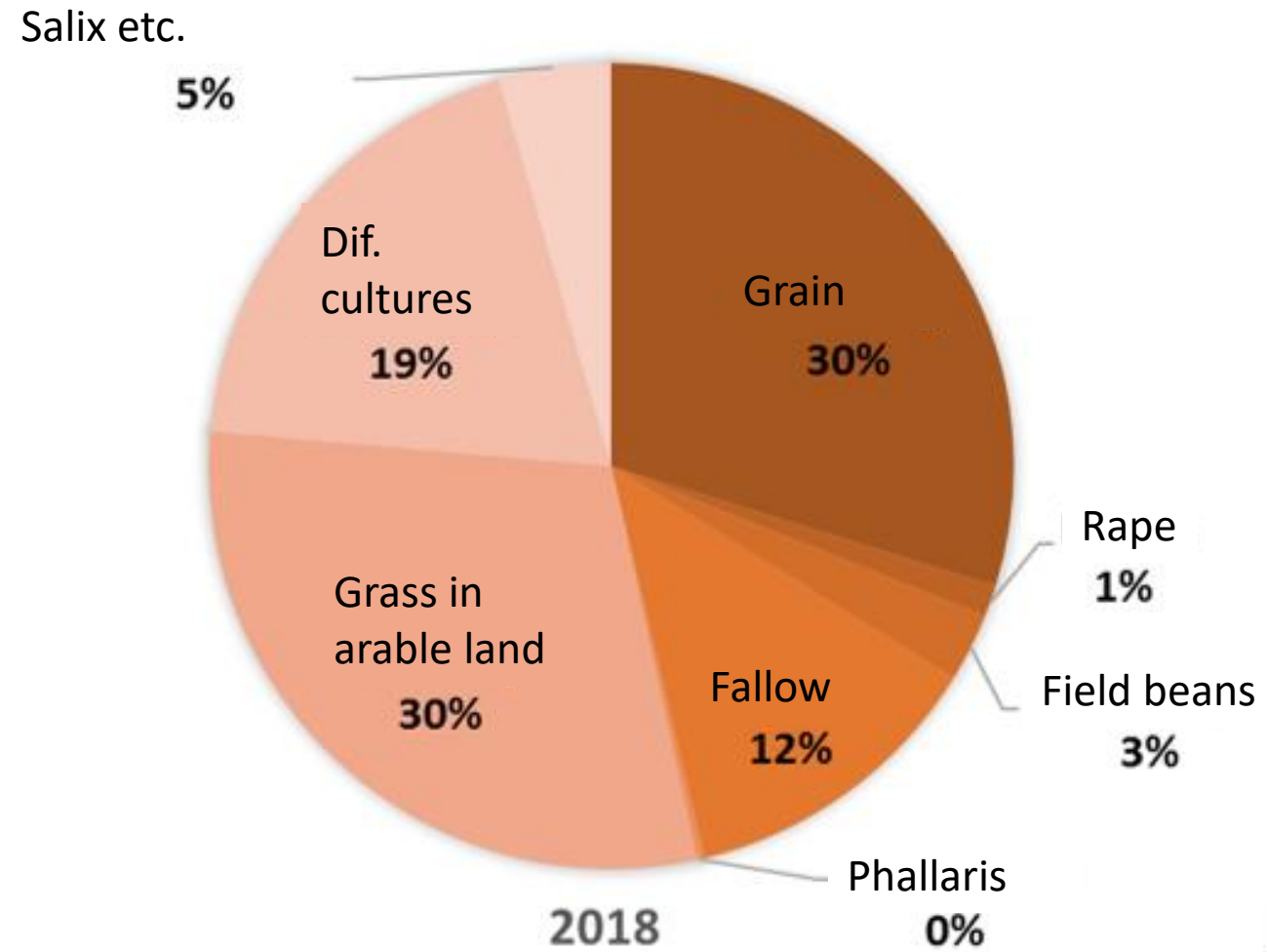


(AREI, 2019)

Uptake



(AREI, 2019)



Management of area in 2018 that was mapped as EU grassland habitat prior to 2018 (AREI, 2019)

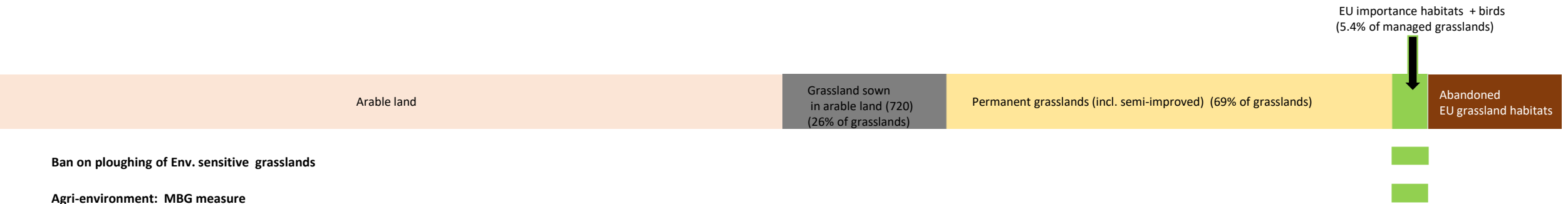
Area in % of EU importance grasslands supported by sub-measure M10.1.1 by payment rate (Source: RSS)

Payment category	2015	2018
“0” class (55 EUR ha ⁻¹)	83%	52.4%
“1” class (83 EUR ha ⁻¹)	10%	28.5%
“2” class (155 EUR ha ⁻¹)	4.7%	12.2%
“3” class (206 EUR ha ⁻¹)	2.1%	6.4%
“4” class (330 EUR ha ⁻¹)	0.2%	0.4%

Presentation plan:

- Overview of the agri-environmental measures focussed on biodiversity conservation
- Grassland measures
- Lessons learned and best practices of agri-env. measures application in 2014-2020 and previous periods
- open questions/challenges





- EU grassland habitats account for 1.1% of agricultural land
- No RDP measures for conventional permanent grasslands
- No RDP measures for restoration
- Few possibilities to increase the area of EU grassland habitats
- 16% of farmers strongly agree and 29% agree to participate in result-oriented measure



THANK YOU



© Nature conservatyon Agency, drawing of Daiga Segliņa

grasslife



Latvijas vides
aizsardzības fonda
administrācija



100 UNIVERSITY
OF LATVIA
ANNO 1919