



Participation in Agri-Environment and related Schemes 2012-2022

Summary to support deliberations on Enhanced Conditionality (Tier 2) implementation post-2026

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Output from ECONOMIC ANALYSIS IN SUPPORT OF THE AGRICULTURAL REFORM PROGRAMME - EOS/003/24

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Introduction

■ Context

- Analysis to support SG policy deliberations on the Enhanced (Tier 2) payments in post-2026 schemes.

■ Purpose

- To characterise participation in agri-environment and related schemes (broadly defined).
- To highlight the kinds of measures that have been taken up.
- To assess if there are temporal trends or differences between regions or sectors (farm types).



Data

- The analysis is based on data supplied by RPID for the period 2012-24. This includes data on
 - **Greening** – the ecological focus areas required as part of BPS payments.
 - **Land Management Options (LMO)** – a non-competitive, elective scheme within Pillar 2 of the CAP, the Rural Development Regulation.
 - **Rural Priorities (RP)** – competitive scheme in Pillar 2 with agri-environmental (Axis 2) as well as other measures (Axis 1 – Competitiveness and Axis 3 - Diversification) – part of the Scottish Rural Development Programme.
 - **Agri-Environment Climate Scheme (AECS)** competitive scheme continues and evolves Axis 2 RP measures.
 - **Forestry Grant Scheme (FGS)** – competitive scheme for all woodland related actions.

- **Interpretation**

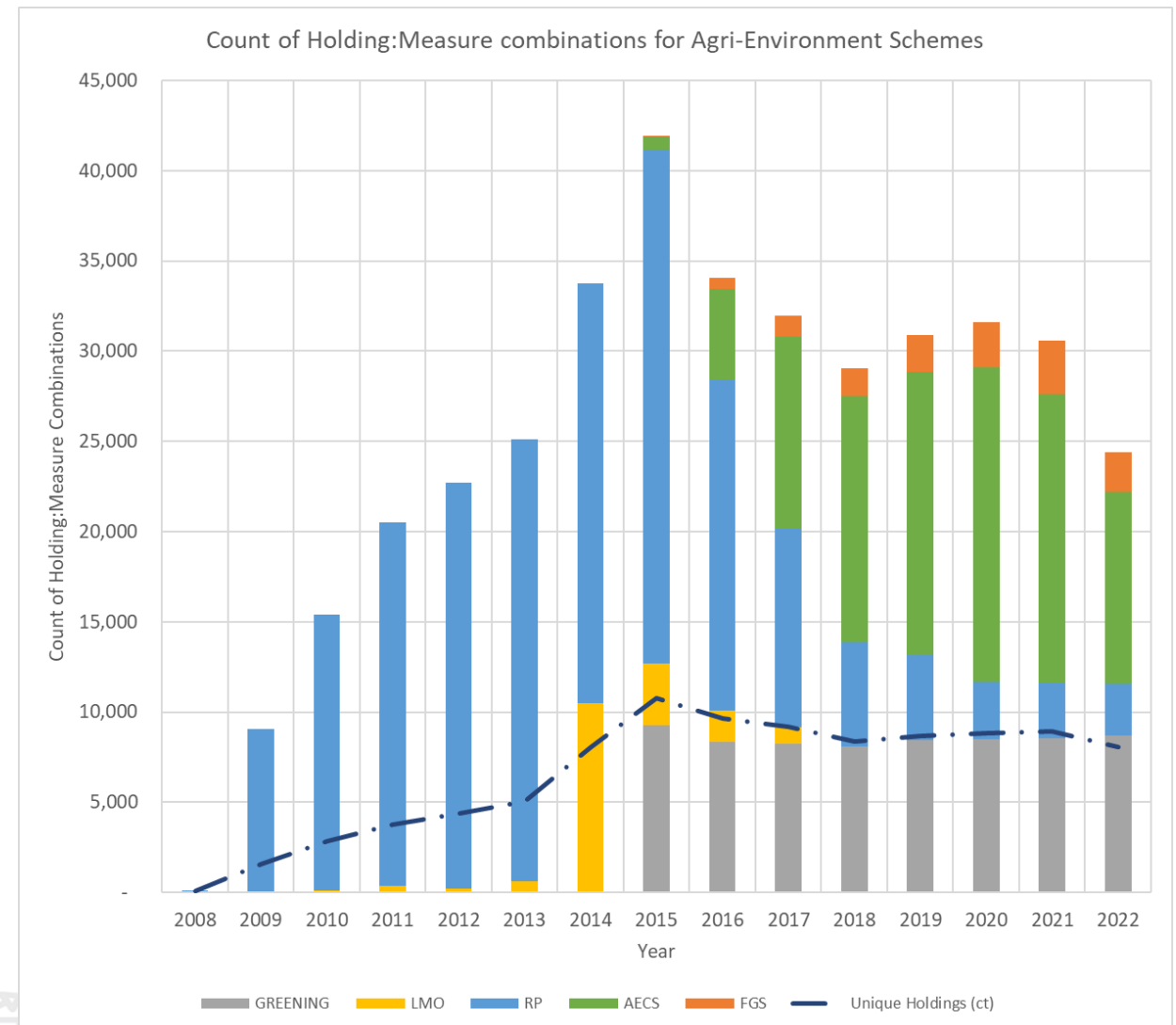
Lessons for Enhanced Conditionality can come from each of these schemes.

- Greening is the most directly analogous with requirements (ha) and a menu of measures each with a weighting. Yet this is limited to arable businesses.
- LMO provides insights across a wider range of possible measures but was a scheme with limited funding available, so numbers of participants are small.
- RP, AECS and FGS differ from EC in that they are fully competitive, often targeted, and, in some cases, limited by the overall level of funding available per measure. Yet they do provide insights into the kinds of measures that have been considered compatible by land managers with the farming businesses within which they are embedded.



Evolution of schemes and participation

- The **metric for participation** used in this analysis is the **count of holding:measure combinations**. Holding was preferred as these tend to have more **distinctive regional presences** (businesses linked to a single region may actually have land in many). The count of combinations gave a way to also assess the numbers of measures per holding giving a **degree of participation**. This measure complements others used elsewhere – e.g. financial value or geographical extents (ha).
- The **count of unique holdings** (only once per holding regardless how many measure are present) is also shown in the chart opposite.
- The chart presents the **mix of schemes over time** – stacked to show **overall level of participation**. This shows a clear trend for increasing participation and activity per holding up to 2015 and a subsequent stabilisation*.
- The chart shows the evolution of the schemes over the decade and the potential for some schemes to have a long overrun (e.g. the tail of RP measures still funded – likely forestry related).
- It appears that without Greening there would have been a drop in overall participation*. Greening has a similar magnitude to LMO but likely a less diverse population as it is limited businesses with larger areas of arable land.



*The limitation of this participation metric will be if there is significant simplification of measures (e.g. rolling multiple measures into a single composite one) then this could mean participation is not reducing.

Participation – counts of holding:measure

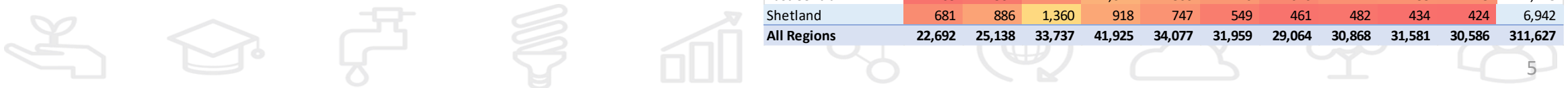
- Tables show counts for all schemes by farm types and region.
- Ordering is based on participation across all years. This ordering is fixed for later tables to enable comparison.
- Time series – the decade before the most recently available data (2022 was only partial data).
- Clear patterns in terms of overall participation but some substantial changes over the decade, some abrupt (e.g. introduction of Greening) and others more gradual (e.g. the reducing numbers of RP and AECS holding:measure combinations).
- Clearest step up in participation comes from farm types undertaking Greening, e.g. Sp. Cereals, General Field Cropping (but noting changes in classification for this type) and Mixed Crops and Livestock.
- Some loss of participation for livestock-based farm types from 2014 / 2015 peak (especially for Cattle), with end of LMO (noting not all these measures are strictly agri-environmental).
- Charts show overall magnitude of participation, but relative levels of participation can also be informative (next slide).

Participation per FarmType over Time - count of holding:measure combinations

Farm Type	Years										All Years
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Specialist cattle - rearing and fattening	6,214	7,287	10,176	8,862	7,221	6,859	6,114	6,313	6,136	5,646	70,828
Specialist sheep and Goats	2,984	3,491	4,903	5,027	4,259	3,855	3,394	3,518	3,649	3,520	38,600
Graziers	2,971	2,945	3,413	6,415	3,578	3,288	2,939	3,078	3,182	3,018	34,827
Specialist cereals, oilseeds and protein crops	1,340	1,337	1,839	4,867	3,905	3,773	4,003	4,431	4,528	4,355	34,378
Sheep and cattle combined	2,900	3,507	4,845	4,834	3,772	3,126	2,671	2,773	2,679	2,664	33,771
Mixed Crops - Livestock	1,959	2,006	2,612	4,046	3,208	3,437	3,244	3,589	3,756	3,840	31,697
General Field Cropping	622	643	1,011	1,736	3,483	3,586	3,368	3,767	4,167	4,052	26,435
No Agricultural Farm Type recorded	1,423	1,631	1,793	2,204	1,859	1,538	1,135	1,197	1,181	1,241	15,202
Various grazing livestock	885	947	1,230	1,478	995	906	756	729	774	798	9,498
Specialist dairying	906	810	1,353	1,280	931	787	588	572	574	540	8,341
Specialist Horticulture and Permanent Cropping	106	168	131	492	375	396	404	437	471	455	3,435
Specialist granivores	180	138	177	306	242	221	257	280	296	276	2,373
Non Classified	114	141	151	277	186	107	141	101	87	85	1,390
Various granivores combined	88	87	103	101	63	80	50	83	101	96	852
All Farm Types	22,692	25,138	33,737	41,925	34,077	31,959	29,064	30,868	31,581	30,586	311,627

Participation per Region over Time - count of holding:measure combinations

Holding (ct) Ag Regions	Years										All Years
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
North East Scotland	5,892	6,100	6,962	10,170	7,518	7,771	7,247	7,620	7,737	7,475	74,492
Highland	3,645	4,309	5,115	6,077	4,751	4,790	4,336	4,677	4,924	4,669	47,293
Scottish Borders	1,898	2,006	2,820	3,880	3,433	3,222	3,120	3,401	3,787	3,570	31,137
Tayside	1,273	1,566	2,149	4,186	3,671	3,452	3,147	3,375	3,436	3,375	29,630
Eileanan an Iar	1,498	1,995	3,316	3,543	3,163	2,264	1,706	1,607	1,583	1,534	22,209
Orkney	1,708	1,897	2,622	2,013	2,034	1,975	1,875	2,016	2,070	1,921	20,131
Dumfries & Galloway	1,738	1,802	2,616	2,802	2,110	1,739	1,338	1,341	1,347	1,334	18,167
Argyll & Bute	1,483	1,589	2,008	1,867	1,396	1,284	1,166	1,192	1,106	1,102	14,193
Lothian	373	409	712	1,275	1,256	1,229	1,438	1,688	1,629	1,674	11,683
Fife	369	405	777	1,449	1,214	1,139	1,091	1,212	1,290	1,215	10,161
Ayrshire	951	956	1,351	1,416	1,081	944	768	795	785	803	9,850
Clyde Valley	720	716	1,215	1,317	843	825	725	745	720	765	8,591
East Central	463	502	714	1,012	860	776	646	717	733	725	7,148
Shetland	681	886	1,360	918	747	549	461	482	434	424	6,942
All Regions	22,692	25,138	33,737	41,925	34,077	31,959	29,064	30,868	31,581	30,586	311,627



Participation – share of the farm type and region

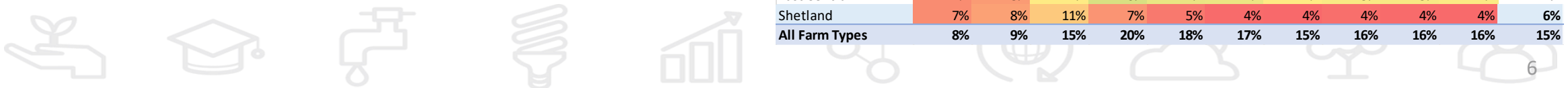
- Comparing rates of participation per farm type and region – rates of participation (%).
- Ordered by participation totals from previous charts – highlights where participation may be high in absolute but not relative terms – e.g. the contrast between Western Isles and Orkney, or Graziers and Sp. Cereals where lower ordered items have higher rates.
- Contrasts seen more clearly (e.g. increases for crop-based systems – in Greening).
- Substantial increases for crop-based systems (mainstreaming) but gradual erosion in livestock-based farm types from 2014/14 peak.
- For farm types there is greater contrast in rates of participation since any region will have a mix of farm types.

Participation per Farm Type - % of all JAC Holdings per Farm Type doing any Ag Env Measures

Farm Type	Years										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	All Years
Specialist cattle - rearing and fattening	16%	22%	37%	33%	28%	26%	23%	24%	25%	25%	26%
Specialist sheep and Goats	8%	9%	16%	14%	12%	10%	9%	10%	11%	11%	11%
Graziers	3%	3%	4%	9%	5%	5%	5%	5%	5%	6%	5%
Specialist cereals, oilseeds and protein crops	10%	10%	20%	66%	64%	63%	64%	65%	65%	64%	48%
Sheep and cattle combined	27%	34%	58%	44%	36%	33%	30%	32%	33%	34%	36%
Mixed Crops - Livestock	16%	18%	31%	63%	63%	63%	62%	61%	63%	61%	49%
General Field Cropping	9%	10%	24%	65%	73%	71%	73%	71%	73%	72%	58%
No Agricultural Farm Type recorded	80%	97%	27%	45%	25%	17%	16%	15%	17%	10%	22%
Various grazing livestock	3%	3%	5%	6%	4%	4%	4%	4%	4%	4%	4%
Specialist dairying	21%	23%	37%	38%	30%	25%	20%	19%	20%	20%	26%
Specialist Horticulture and Permanent Cropping	3%	4%	12%	19%	17%	16%	16%	16%	17%	16%	14%
Specialist granivores	3%	3%	4%	8%	8%	8%	8%	8%	8%	8%	7%
Non Classified	4%	5%	7%	7%	5%	4%	4%	4%	4%	3%	5%
Various granivores combined	8%	8%	10%	15%	12%	10%	8%	10%	11%	9%	10%
All Farm Types	8%	9%	15%	20%	18%	17%	15%	16%	16%	16%	15%

Participation per Region - % of all JAC Holdings per Region doing any Ag Env Measures

Ag Regions	Years										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	All Years
North East Scotland	11%	12%	16%	29%	26%	25%	25%	25%	26%	25%	22%
Highland	7%	8%	11%	13%	11%	10%	9%	10%	11%	10%	10%
Scottish Borders	15%	16%	27%	34%	31%	30%	29%	28%	30%	29%	27%
Tayside	8%	9%	17%	36%	35%	33%	32%	32%	32%	31%	27%
Eileanan an Iar	4%	6%	9%	9%	8%	7%	6%	7%	8%	7%	7%
Orkney	11%	12%	18%	16%	15%	13%	13%	14%	15%	14%	14%
Dumfries & Galloway	10%	11%	20%	20%	16%	15%	10%	11%	11%	10%	13%
Argyll & Bute	16%	18%	26%	24%	19%	17%	15%	15%	15%	14%	18%
Lothian	5%	6%	13%	29%	28%	27%	26%	26%	26%	25%	21%
Fife	5%	5%	14%	32%	31%	30%	30%	29%	30%	27%	23%
Ayrshire	8%	10%	16%	16%	13%	11%	9%	10%	11%	11%	12%
Clyde Valley	5%	5%	11%	11%	9%	9%	7%	8%	8%	8%	8%
East Central	7%	8%	14%	20%	17%	17%	14%	15%	15%	14%	14%
Shetland	7%	8%	11%	7%	5%	4%	4%	4%	4%	4%	6%
All Farm Types	8%	9%	15%	20%	18%	17%	15%	16%	16%	16%	15%



Participation – number of measures per holding

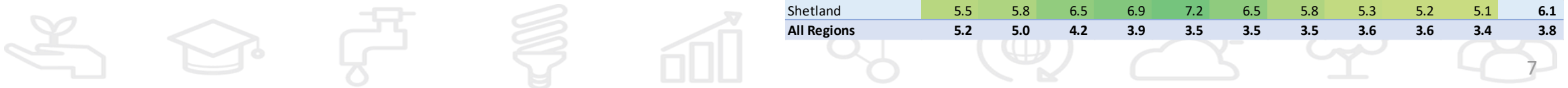
- Another measure of participation is the number of measures per holding.
- The tables show this over time for Farm Type and Regions, ordered as the two previous slides to allow comparison.
- The numbers of measures per holding show strong contrasts in both farm types and regions.
- More intensive and more specialised farm types tend to have fewer measures even when they have higher absolute or relative levels of participation.
- Notable sector is Sheep and Cattle combined with average 6.1 measures per holding. These tend to be large holdings that have had significant absolute participation (34k ranked 5th) and the highest relative participation for livestock holdings (36%).
- Notable region is Shetland with low overall and relative numbers of participants but where participation occurs then the numbers of measures are second only to Orkney (All years 6.1 vs 7.0).
- The time series shows the same patterns of change as the last two slides.

Holding Level Intensity per Farm Type - Ag Env Measures per Holding

Farm Type	Years										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	All Years
Specialist cattle - rearing and fattening	6.2	6.0	5.0	5.2	4.9	4.8	4.9	4.9	4.7	4.5	5.1
Specialist sheep and Goats	5.8	5.7	4.6	5.4	5.4	5.0	4.9	4.6	4.5	4.4	5.0
Graziers	4.6	4.4	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.7	3.3
Specialist cereals, oilseeds and protein crops	5.4	5.1	3.4	2.9	2.4	2.4	2.7	2.9	3.0	2.9	2.9
Sheep and cattle combined	6.8	6.6	5.6	6.5	6.4	6.1	6.0	5.8	5.7	5.3	6.1
Mixed Crops - Livestock	6.3	6.1	4.5	3.7	3.1	3.3	3.3	3.6	3.7	3.8	3.8
General Field Cropping	5.5	5.4	3.7	2.7	2.6	2.8	2.7	3.1	3.3	3.1	3.0
No Agricultural Farm Type recorded	2.8	2.6	2.4	2.6	2.4	2.2	2.1	2.0	2.0	1.8	2.3
Various grazing livestock	4.7	4.9	3.8	4.3	3.9	4.1	4.0	3.9	3.8	3.6	4.1
Specialist dairying	3.3	2.7	2.9	2.7	2.6	2.6	2.6	2.7	2.8	2.7	2.8
Specialist Horticulture and Permanent Cropping	3.8	4.4	4.4	3.2	2.6	2.7	2.7	3.0	3.0	2.9	3.0
Specialist granivores	4.4	3.5	3.3	3.3	2.8	2.5	2.8	3.0	3.1	2.8	3.0
Non Classified	1.8	1.7	1.7	2.5	2.4	2.3	2.3	1.7	1.7	1.6	2.0
Various granivores combined	5.9	4.8	4.7	3.5	2.5	3.2	2.8	3.5	3.9	4.2	3.8
All Farm Types	5.2	5.0	4.2	3.9	3.5	3.5	3.5	3.6	3.6	3.4	3.8

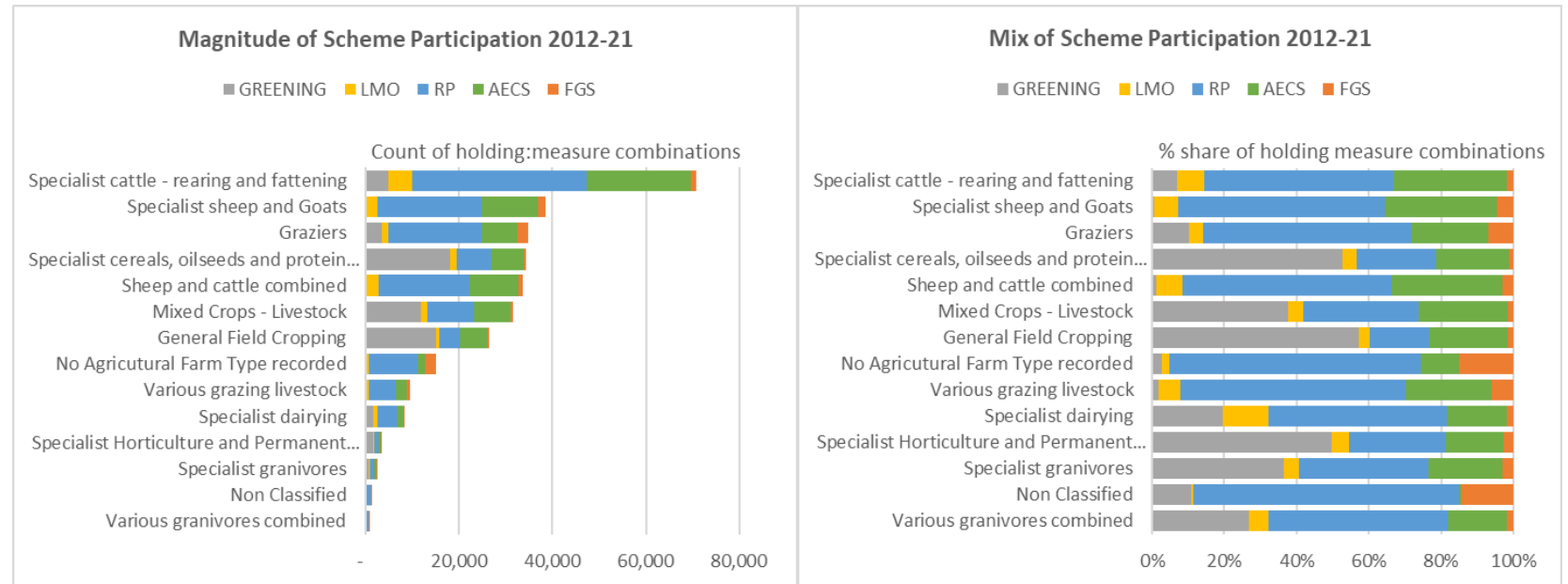
Holding Level Intensity per Region - Ag Env Measures per Holding

Ag Regions	Years										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	All Years
North East Scotland	5.9	5.8	4.7	3.8	3.1	3.3	3.2	3.3	3.3	3.2	3.7
Highland	5.2	5.2	4.4	4.5	4.0	4.1	4.2	4.1	4.2	3.9	4.3
Scottish Borders	5.0	4.8	4.0	4.4	4.3	4.1	4.1	4.5	4.8	4.4	4.4
Tayside	4.3	4.6	3.5	3.1	2.8	2.8	2.6	2.8	2.9	2.8	3.0
Eileanan an Iar	5.8	5.3	5.8	6.0	5.8	4.7	4.0	3.5	3.1	3.1	4.7
Orkney	7.5	7.6	7.0	6.2	6.8	7.5	7.3	7.3	6.9	6.6	7.0
Dumfries & Galloway	4.2	3.8	3.0	3.3	3.1	2.8	3.1	3.0	2.9	2.9	3.2
Argyll & Bute	4.6	4.3	3.8	3.8	3.5	3.5	3.8	3.8	3.6	3.3	3.8
Lothian	4.4	4.4	3.4	2.8	2.9	2.9	3.6	4.1	4.0	4.0	3.5
Fife	4.8	4.9	3.4	2.9	2.5	2.4	2.3	2.6	2.8	2.7	2.7
Ayrshire	3.9	3.3	2.9	3.0	2.8	2.8	2.8	2.6	2.5	2.4	2.9
Clyde Valley	4.7	4.2	3.4	3.4	2.8	2.9	3.0	2.9	2.7	2.7	3.2
East Central	4.1	3.8	3.0	3.0	2.9	2.7	2.7	2.8	2.9	2.8	3.0
Shetland	5.5	5.8	6.5	6.9	7.2	6.5	5.8	5.3	5.2	5.1	6.1
All Regions	5.2	5.0	4.2	3.9	3.5	3.5	3.5	3.6	3.6	3.4	3.8

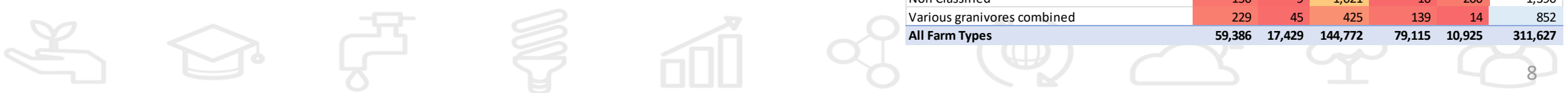


Participation – Schemes per Farm Type

- Relative importance of schemes per farm type
 - Caveat - Not normalised for the number of years a scheme is available.
- Magnitude – degree of participation
 - Compatibility of FTs with measures in the scheme.
 - Possibly also resources to participate – cattle more than sheep but are cattle holdings better candidates for measures?
- Mix – the relative importance of Schemes per farm type
 - Importance of LMO for Dairy.
 - FGS on non-agricultural holdings.



Farm Type	Scheme					All Schemes
	GREENING	LMO	RP	AECS	FGS	
Specialist cattle - rearing and fattening	4,919	5,241	37,150	22,282	1,236	70,828
Specialist sheep and Goats	261	2,470	22,194	11,896	1,779	38,600
Graziers	3,559	1,388	20,033	7,495	2,352	34,827
Specialist cereals, oilseeds and protein crops	18,092	1,354	7,611	6,955	366	34,378
Sheep and cattle combined	381	2,436	19,558	10,409	987	33,771
Mixed Crops - Livestock	11,907	1,409	10,053	7,875	453	31,697
General Field Cropping	15,126	823	4,349	5,774	363	26,435
No Agricultural Farm Type recorded	398	331	10,570	1,623	2,280	15,202
Various grazing livestock	167	586	5,923	2,248	574	9,498
Specialist dairying	1,624	1,072	4,110	1,377	158	8,341
Specialist Horticulture and Permanent Cropping	1,707	168	920	550	90	3,435
Specialist granivores	866	97	855	482	73	2,373
Non Classified	150	9	1,021	10	200	1,390
Various granivores combined	229	45	425	139	14	852
All Farm Types	59,386	17,429	144,772	79,115	10,925	311,627



Participation – Schemes per AgRegion

- Relative importance of schemes per AgRegion

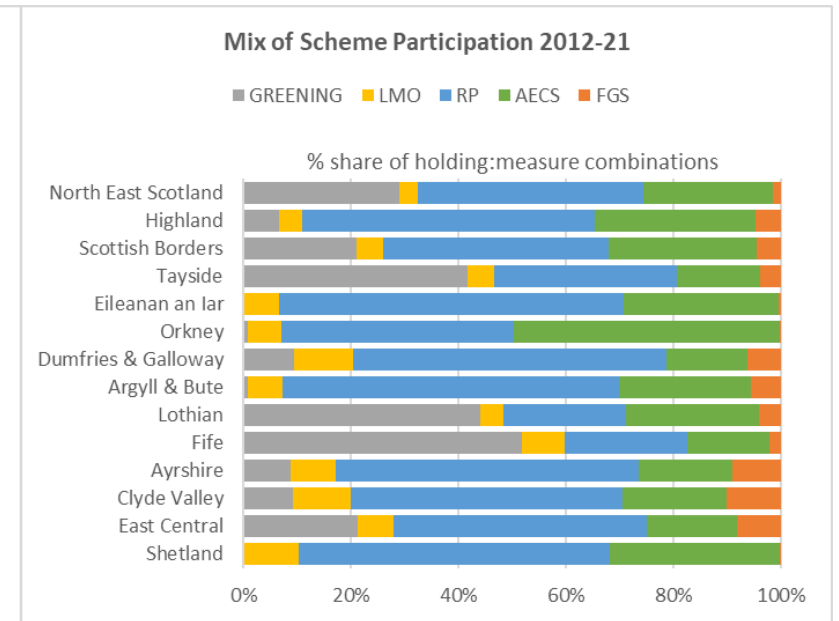
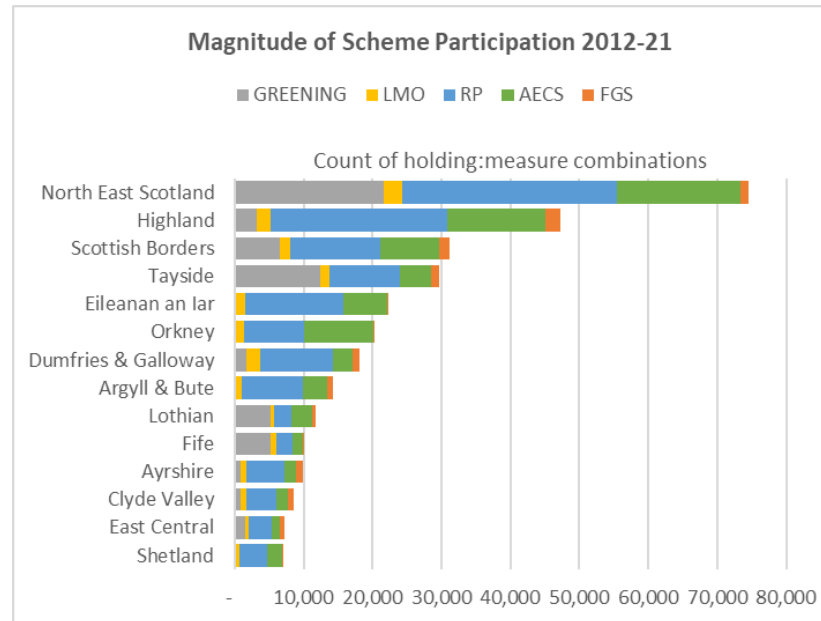
- Caveat – as for Farm Type.

- Magnitude

- Compatibility of AgRegions with measures in the scheme – NE much smaller than Highland but greater participation.
 - Capacity from FT mix per region.
 - Highest participation in regions that can deliver from multiple schemes – lowland and upland/hill.
 - Option look a mixes per holding.**

- Mix

- Importance of LMO ~10% for several regions associated with dairy systems.
 - FGS similar shares across most regions.
 - RP vs. AECS some regions see more participation in AECS (Orkney) others significant drop (Dumfries and Galloway) but RP includes more than agri-environmental measures.
 - Option to classify all measures per Scheme to only have agri-environment.**



Ag Region	GREENING	LMO	RP	AECS	FGS	All Schemes
North East Scotland	21,658	2,572	31,173	17,991	1,098	74,492
Highland	3,145	2,043	25,713	14,150	2,242	47,293
Scottish Borders	6,552	1,547	13,042	8,584	1,412	31,137
Tayside	12,388	1,421	10,122	4,577	1,122	29,630
Eileanan an Iar	4	1,477	14,241	6,402	85	22,209
Orkney	171	1,271	8,706	9,965	18	20,131
Dumfries & Galloway	1,730	1,983	10,572	2,755	1,127	18,167
Argyll & Bute	124	906	8,907	3,460	796	14,193
Lothian	5,160	482	2,671	2,895	475	11,683
Fife	5,267	810	2,312	1,553	219	10,161
Ayrshire	872	812	5,573	1,707	886	9,850
Clyde Valley	791	923	4,339	1,681	857	8,591
East Central	1,523	476	3,372	1,197	580	7,148
Shetland	1	706	4,029	2,198	8	6,942
All Regions	59,386	17,429	144,772	79,115	10,925	311,627



Measures per Farm Type or Region (Method)

- Again, participation defined by counts of holding:measure combinations.
- Table of the most common measures per farm type
 - Relative participation per Farm Type or Region - % of holding:measure combinations,
 - Ordered by % for all Farm Types or Regions,
 - Highlighted where >5% (pink) and >10% (orange),
 - Measures are not included in the tables if they account for less than 5% for any farm type or region. The presence of these “missing” measures is indicated by the black line breaks between measure names in the table.
- Example for RP measures opposite
- Commentary per Scheme on next slides

Schemes/Measure	RP																	
RP21409 - Open Grazed or Wet Grassland for Wildlife	4%	6%	6%	6%	8%	4%	7%	4%	3%	2%	4%	4%	0%	8%	7%			
RP21421A - Water Margins - Enhance biodiversity	4%	5%	3%	5%	6%	5%	8%	8%	6%	3%	6%	6%	0%	8%	6%			
RP22301D - Woodland creation - Native woodland planting	8%	8%	7%	6%	5%	4%	6%	7%	9%	9%	10%	9%	13%	4%	6%			
RP21433A - Hedgerows - 3 years for biodiversity benefits	3%	3%	2%	3%	4%	4%	7%	6%	5%	3%	6%	7%	0%	8%	5%			
RP21418 - Management of Wetland	3%	4%	3%	4%	5%	4%	5%	3%	4%	2%	2%	4%	0%	6%	4%			
RP21414 - Management of Species Rich Grassland	3%	3%	4%	4%	4%	3%	4%	3%	3%	3%	2%	3%	0%	6%	4%			
RP21402 - Wild Bird Seed Mix/Unharvested Crop	3%	3%	2%	2%	4%	2%	5%	5%	5%	3%	3%	3%	0%	4%	3%			
RP22301F - Woodland creation - Mixed conifer/broadleaved woodland	3%	3%	2%	1%	2%	1%	3%	5%	8%	7%	5%	1%	7%	2%	2%			
RP21434 - Management of extended hedges and hedgerow trees	2%	2%	1%	1%	2%	3%	4%	3%	3%	2%	2%	5%	0%	2%	2%			
RP22501D - Sustainable Management Of Forests - Restructuring felling	3%	2%	1%	1%	0%	1%	1%	2%	2%	2%	1%	1%	13%	3%	2%			
RP21435A - Grass Margins and Beetlebanks - Create/manage - Mixed arable	1%	0%	0%	0%	1%	1%	5%	5%	5%	3%	2%	2%	0%	2%	2%			
RP21421B - Water Margins - reduce diffuse pollution	1%	1%	0%	1%	1%	14%	1%	1%	0%	1%	0%	0%	0%	1%	1%			



Measures per Farm Type – RP & AECS

- RP (258 measures)
 - 3 are >5% of participation from all Farm Types, and 12 are >5% for at least one Farm Type.
 - Clear “profiles” of combinations of RP (or AECS) measures per farm type.
 - Some measures appear across all farm types suggesting compatibility with many systems.
- AECS (76 measures)
 - Continuity for some measures from RP (grass and wetlands).
 - Some greater concentration e.g. wader grasslands for livestock or wild bird seed for crop systems.
 - For livestock systems, the top seven measures have very similar percentages (except for the top option – Wader grazed grassland) - at >12%) suggesting compatibility across the types of livestock systems despite their typically contrasting intensities of production.
 - Option to assess

Schemes/Measure

RP

RP21409 - Open Grazed or Wet Grassland for Wildlife	4%	6%	6%	6%	8%	4%	7%	4%	3%	2%	4%	4%	0%	8%	7%
RP21421A - Water Margins - Enhance biodiversity	4%	5%	3%	5%	6%	5%	8%	8%	6%	3%	6%	6%	0%	8%	6%
RP22301D - Woodland creation - Native woodland planting	8%	8%	7%	6%	5%	4%	6%	7%	9%	9%	10%	9%	13%	4%	6%
RP21433A - Hedgerows - 3 years for biodiversity benefits	3%	3%	2%	3%	4%	4%	7%	6%	5%	3%	6%	7%	0%	8%	5%
RP21418 - Management of Wetland	3%	4%	3%	4%	5%	4%	5%	3%	4%	2%	2%	4%	0%	6%	4%
RP21414 - Management of Species Rich Grassland	3%	3%	4%	4%	4%	3%	4%	3%	3%	3%	2%	3%	0%	6%	4%
RP21402 - Wild Bird Seed Mix/Unharvested Crop	3%	3%	2%	2%	4%	2%	5%	5%	5%	3%	3%	3%	0%	4%	3%
RP22301F - Woodland creation - Mixed conifer/broadleaved woodland	3%	3%	2%	1%	2%	1%	3%	5%	8%	7%	5%	1%	7%	2%	2%
RP21434 - Management of extended hedges and hedgerow trees	2%	2%	1%	1%	2%	3%	4%	3%	3%	2%	2%	5%	0%	2%	2%
RP22501D - Sustainable Management Of Forests - Restructuring felling	3%	2%	1%	1%	0%	1%	1%	2%	2%	2%	1%	1%	13%	3%	2%
RP21435A - Grass Margins and Beetlebanks - Create/manage - Mixed arable	1%	0%	0%	0%	1%	1%	5%	5%	5%	3%	2%	2%	0%	2%	2%
RP21421B - Water Margins - reduce diffuse pollution	1%	1%	0%	1%	1%	14%	1%	1%	0%	1%	0%	0%	0%	1%	1%

AECS

Wader grazed grassland	15%	13%	13%	12%	13%	8%	8%	5%	5%	4%	3%	6%	10%	15%	11%
Water margins in grassland fields	7%	9%	7%	8%	9%	8%	9%	6%	7%	6%	5%	4%	0%	2%	8%
Wild bird seed for farmland birds	6%	8%	5%	4%	6%	3%	10%	13%	12%	12%	12%	9%	0%	2%	7%
Wetland management only	6%	6%	7%	6%	7%	4%	5%	3%	3%	3%	0%	4%	0%	4%	6%
Species rich grassland management only	6%	6%	7%	7%	6%	3%	3%	3%	2%	2%	9%	6%	0%	9%	5%
Species rich grassland creation and management	5%	5%	4%	3%	6%	4%	6%	7%	8%	7%	4%	3%	0%	1%	5%
Wader and wildlife mown grassland	5%	6%	5%	5%	8%	5%	4%	2%	2%	3%	2%	1%	0%	1%	5%
Habitat mosaic management	5%	7%	6%	7%	6%	4%	3%	2%	2%	1%	1%	2%	0%	3%	5%
Retention of winter stubble for wildlife and water quality	2%	1%	1%	1%	5%	3%	8%	9%	9%	6%	5%	6%	0%	1%	4%
Moorland management (livestock only)	1%	2%	9%	7%	2%	1%	0%	0%	0%	1%	4%	1%	0%	15%	3%
Management or restoration of existing hedgerows	3%	4%	3%	3%	2%	3%	4%	4%	5%	7%	7%	3%	0%	0%	3%
Grass strips in arable fields	1%	1%	0%	0%	1%	2%	7%	12%	10%	6%	8%	3%	0%	0%	3%
Water margins in arable fields	1%	0%	0%	0%	1%	2%	7%	10%	9%	6%	13%	4%	0%	0%	3%
Stubbles followed by green manure in an arable rotation	1%	0%	0%	0%	1%	1%	5%	9%	8%	5%	4%	5%	0%	0%	2%
Management of cover for corncrakes	4%	1%	2%	2%	2%	0%	0%	0%	0%	0%	0%	0%	10%	1%	2%
Organic Farming Maintenance - Improved grassland	1%	2%	1%	1%	1%	9%	2%	0%	1%	4%	1%	2%	10%	0%	1%
Cropped machair	1%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	15%	1%
Organic Farming Maintenance - Arable	1%	1%	0%	1%	1%	6%	1%	0%	1%	1%	0%	2%	0%	0%	1%
Corncrake mown grassland (not mown before 15th August)	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	10%	0%	1%
Deleted AECS	1%	0%	1%	1%	1%	1%	1%	1%	0%	1%	1%	2%	10%	1%	1%
Lowland bog management with grazing	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	2%	10%	0%	0%
Organic Farming Conversion - Fruit and vegetables	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	2%	5%	20%	0%	0%
Organic Farming Maintenance - Fruit and vegetables	0%	0%	0%	0%	0%	1%	1%	0%	1%	5%	0%	1%	0%	0%	0%
Improving public access (capital only)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%



Measures per Region

– RP & AECS

■ RP

- Typically, low concentration of participation in even the most favoured measures, exception of NE, Orkney and Shetland.
- Universality of native woodlands, water margins and wet grasslands.

■ AECS

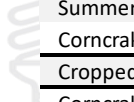
- Greater concentration in top 5/10 measures across all regions compared to RP.
- Top 5 measures have similar percentages across nearly all regions (exceptions being Western Isles and Shetland).
- Profiles of stronger uptake (>5%) for sets of measures – see Western Isles and Fife, Lothian and NE indicating region-specific combinations.

Scheme/Measure

RP																
RP21409 - Open Grazed or Wet Grassland for Wildlife	7%	3%	6%	4%	4%	9%	6%	6%	3%	8%	10%	4%	15%	3%	7%	
RP21421A - Water Margins - Enhance biodiversity	3%	5%	5%	5%	4%	1%	5%	5%	4%	11%	7%	6%	2%	5%	6%	
RP22301D - Woodland creation - Native woodland planting	4%	2%	5%	7%	9%	0%	4%	9%	6%	7%	1%	8%	0%	6%	6%	
RP21433A - Hedgerows - 3 years for biodiversity benefits	1%	5%	5%	3%	2%	0%	5%	4%	4%	11%	3%	4%	1%	3%	5%	
RP21418 - Management of Wetland	5%	4%	4%	4%	3%	4%	5%	3%	3%	5%	8%	3%	10%	4%	4%	
RP21414 - Management of Species Rich Grassland	5%	4%	4%	3%	2%	5%	5%	4%	3%	4%	7%	4%	10%	3%	4%	
RP21403 - Mown Grassland for Wildlife	2%	3%	3%	2%	2%	0%	2%	4%	1%	5%	9%	2%	10%	1%	4%	
RP21402 - Wild Bird Seed Mix/Unharvested Crop	1%	3%	3%	3%	2%	1%	5%	3%	4%	5%	7%	4%	3%	4%	3%	
RP21417 - Management of Habitat Mosaics	4%	2%	2%	3%	3%	2%	2%	4%	3%	2%	3%	2%	5%	3%	3%	
RP22301F - Woodland creation - Mixed conifer/broadleaved woodland	1%	1%	1%	3%	1%	0%	3%	1%	6%	3%	0%	5%	0%	6%	2%	
RP22501D - Sustainable Management Of Forests - Restructuring felling	3%	1%	2%	5%	5%	0%	1%	1%	3%	1%	0%	3%	0%	4%	2%	
RP21441A - Conservation Management for Small Units - Individual	1%	0%	0%	0%	0%	7%	0%	2%	0%	1%	1%	0%	5%	0%	1%	
RP21421B - Water Margins - reduce diffuse pollution	0%	9%	3%	2%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	1%	
RP21408 - Management of Cover for Corncrakes	6%	0%	0%	0%	0%	5%	0%	1%	0%	0%	2%	0%	0%	0%	1%	
RP21406 - Grazed Grassland for Corncrakes	3%	0%	0%	0%	0%	6%	0%	0%	0%	0%	2%	0%	0%	0%	1%	
RP21429 - Moorland - Stock Disposal	1%	1%	2%	1%	1%	0%	0%	1%	1%	0%	0%	1%	5%	1%	1%	

AECS

Wader grazed grassland	9%	8%	13%	7%	8%	22%	10%	11%	8%	9%	13%	8%	19%	7%	11%
Water margins in grassland fields	1%	10%	7%	10%	10%	0%	6%	8%	8%	11%	6%	10%	1%	8%	8%
Wild bird seed for farmland birds	1%	3%	3%	5%	6%	0%	12%	5%	10%	10%	9%	9%	4%	9%	7%
Wetland management only	6%	7%	7%	9%	6%	4%	2%	6%	3%	5%	7%	5%	13%	4%	6%
Species rich grassland management only	7%	7%	5%	4%	5%	9%	3%	6%	3%	3%	7%	6%	10%	4%	5%
Species rich grassland creation and management	1%	3%	1%	3%	3%	0%	4%	6%	5%	7%	9%	3%	4%	7%	5%
Wader and wildlife mown grassland	1%	3%	4%	3%	4%	0%	2%	8%	3%	5%	13%	2%	12%	2%	5%
Habitat mosaic management	8%	5%	5%	6%	8%	3%	2%	7%	6%	3%	4%	4%	5%	4%	5%
Retention of winter stubble for wildlife and water quality	0%	2%	2%	1%	2%	0%	3%	3%	4%	8%	7%	3%	0%	6%	4%
Moorland management (livestock only)	4%	8%	10%	9%	5%	3%	0%	4%	3%	1%	1%	4%	13%	4%	3%
Management or restoration of existing hedgerows	0%	5%	4%	5%	5%	0%	4%	3%	5%	4%	0%	6%	0%	4%	3%
Grass strips in arable fields	0%	0%	2%	1%	1%	0%	7%	1%	8%	6%	0%	5%	0%	4%	3%
Water margins in arable fields	0%	0%	1%	1%	3%	0%	8%	1%	6%	6%	0%	4%	0%	5%	3%
Stubbles followed by green manure in an arable rotation	0%	0%	0%	1%	2%	0%	5%	1%	6%	5%	0%	4%	0%	4%	2%
Creation of hedgerows	0%	0%	0%	1%	2%	0%	10%	4%	4%	1%	0%	7%	0%	4%	2%
Management of cover for corncrakes	10%	0%	0%	0%	0%	9%	0%	2%	0%	0%	2%	0%	0%	0%	2%
Corncrake grazing management	4%	0%	0%	0%	0%	11%	0%	1%	0%	0%	3%	0%	0%	0%	2%
Cattle management on small units (retention)	1%	0%	0%	0%	0%	11%	0%	2%	0%	0%	0%	0%	0%	0%	1%
Summer hill grazing of cattle	4%	4%	5%	5%	2%	0%	0%	2%	1%	0%	0%	1%	0%	1%	1%
Corncrake mown grassland (not mown before 1st August)	6%	0%	0%	0%	0%	6%	0%	1%	0%	0%	2%	0%	0%	0%	1%
Cropped machair	0%	0%	0%	0%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Corncrake mown grassland (not mown before 1st September)	5%	0%	0%	0%	0%	3%	0%	0%	0%	0%	2%	0%	0%	0%	1%
Stock disposal	2%	3%	4%	2%	1%	0%	0%	1%	0%	0%	0%	1%	6%	0%	1%



Measures per Region – LMO & FGS

LMO

- Across regions stubble retention was common where cropping is present – up to 34% of LMO participation but not universal with only 5% in D&G and 8% in Borders.
- Wider diversity of measures taken up so little regional distinctiveness.
- Animal welfare and related measures favoured by W&N Isles.

FGS

- Top three measures have little regional differentiation (exception of W&N Isles – with their own region-specific measures).
- Conifers remain the largest but only marginally (19% vs 18% for Native Broadleaves) seeing balance of woodland objectives.
- Highland has a greater focus on native trees (Birch and Pine).

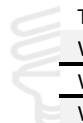
Scheme/Measure

LMO

Retention of Winter Stubbles	5%	17%	13%	5%	10%	0%	17%	9%	8%	34%	22%	8%	0%	27%	14%
Improving Rush Pasture	17%	21%	16%	15%	19%	4%	2%	15%	6%	4%	1%	8%	0%	3%	9%
Improvement of rush pasture	17%	23%	16%	13%	16%	7%	2%	15%	4%	4%	1%	4%	0%	2%	9%
Management of Linear Features-Dykes	3%	3%	3%	20%	3%	0%	8%	4%	5%	4%	3%	14%	2%	6%	6%
Animal Welfare Programme - (Review, Benchmarking & Plan)	5%	3%	7%	2%	4%	18%	4%	6%	5%	4%	11%	3%	15%	3%	6%
Implementing bio-security	4%	1%	3%	1%	2%	15%	2%	4%	3%	3%	10%	2%	14%	2%	4%
Wild bird seed / unharvested crop	0%	2%	2%	1%	6%	0%	9%	3%	11%	9%	0%	7%	0%	9%	4%
Summer Cattle Grazing	20%	4%	3%	7%	6%	0%	0%	8%	1%	0%	0%	7%	0%	1%	4%
Management of linear features - Dykes	3%	1%	1%	12%	4%	0%	5%	2%	3%	3%	1%	9%	1%	3%	4%
Maintaining bodily condition	2%	2%	4%	2%	2%	12%	3%	4%	2%	2%	6%	2%	14%	2%	4%
Control of bovine viral diarrhoea	3%	2%	4%	1%	2%	8%	3%	3%	3%	3%	8%	2%	2%	2%	3%
Wild Birdseed Mix/Unharvested Crop	0%	2%	1%	1%	4%	0%	7%	2%	10%	5%	1%	6%	0%	7%	3%
Johne's disease control	1%	1%	2%	1%	1%	9%	2%	1%	2%	2%	6%	1%	8%	2%	3%
Liver fluke control	2%	2%	4%	1%	0%	3%	2%	2%	2%	1%	6%	0%	13%	1%	2%
Control and prevention of diarrhoea and pneumonia	1%	1%	2%	1%	2%	2%	2%	2%	1%	2%	6%	0%	7%	1%	2%
Sheep scab control	3%	1%	3%	0%	1%	7%	1%	2%	1%	1%	4%	1%	0%	1%	2%
Preventing lameness - Sheep/Goats only	2%	1%	2%	1%	1%	8%	1%	2%	1%	1%	3%	1%	6%	0%	2%
Est and man of grass margins and beetle banks in arable fields	0%	0%	0%	0%	1%	0%	7%	0%	8%	2%	0%	5%	0%	6%	2%
Quality Assurance Schemes	1%	0%	2%	4%	2%	0%	2%	2%	1%	1%	2%	0%	1%	2%	2%
Grass margins and Beetlebanks - creation and management	0%	0%	0%	0%	0%	0%	7%	0%	9%	2%	0%	4%	0%	3%	2%
Management of moorland grazing	6%	1%	1%	1%	2%	0%	0%	3%	2%	0%	0%	2%	0%	1%	1%
Preventing lameness - Cattle only	0%	2%	2%	1%	1%	3%	1%	1%	0%	0%	0%	0%	6%	0%	1%

FGS

Woodland Creation - Conifer	18%	37%	30%	26%	18%	0%	11%	4%	28%	17%	0%	24%	0%	15%	19%
Woodland Creation - Native Broadleaves	13%	21%	22%	9%	17%	0%	26%	20%	23%	22%	0%	20%	0%	17%	18%
Woodland Improvement Grant - Restructuring Regeneration	11%	5%	3%	19%	8%	0%	6%	9%	5%	12%	0%	11%	0%	11%	10%
Woodland Creation - Small or Farm Woodlands	1%	3%	7%	10%	4%	0%	11%	3%	15%	9%	0%	10%	0%	7%	7%
Woodland Creation - Diverse Conifer	3%	4%	10%	4%	8%	0%	9%	4%	5%	11%	0%	9%	0%	6%	6%
Woodland Creation - Broadleaves	7%	11%	11%	3%	15%	0%	11%	4%	7%	4%	0%	3%	0%	1%	5%
Woodland Creation - Native Upland Birch	8%	2%	5%	1%	3%	0%	0%	13%	4%	3%	0%	2%	0%	4%	5%
Woodland Improvement Grant - Long Term Forest Plan	8%	3%	2%	5%	3%	0%	7%	6%	2%	4%	0%	2%	0%	5%	4%
Woodland Creation - Native Scots Pine	2%	0%	0%	0%	1%	0%	0%	11%	0%	4%	0%	0%	0%	7%	4%
Sustainable Management of Forests - Species Conservation - Gre	1%	1%	0%	7%	4%	0%	0%	0%	0%	0%	0%	8%	0%	14%	4%
Tree Health	7%	7%	1%	10%	0%	0%	0%	1%	0%	0%	0%	1%	0%	2%	3%
Woodland Creation - Native Low Density	5%	0%	0%	1%	1%	0%	2%	4%	0%	1%	0%	5%	0%	2%	2%
Woodland Improvement Grant - Habitats and Species	2%	0%	0%	0%	0%	2%	0%	6%	0%	2%	0%	0%	0%	1%	2%
Woodland Creation - Native Broadleaves in N and W Isles	0%	0%	0%	0%	0%	91%	0%	2%	0%	0%	100%	0%	100%	0%	1%
Harvesting and Processing	1%	0%	0%	1%	1%	0%	5%	1%	1%	1%	0%	1%	0%	1%	1%



Measures per Region – Greening

- Greening
 - Again, the smaller numbers of measures means greater concentration (higher % per measure).
 - Regional contrasts not as strong as seen for farm types since regions typically have a mix of farm types.
 - Fallow+ model typical across regions, which means maximising the value of fallow (via management prescriptions) is a means to increase impact but conditioned by the need for the measures to work across all regions.

Scheme/Measure															
GREENING															
EFA Fallow	44%	46%	57%	41%	44%	0%	46%	58%	30%	51%	66%	30%	0%	46%	45%
EFA Margins	5%	5%	9%	8%	13%	0%	15%	10%	19%	14%	0%	20%	0%	15%	15%
EFA FIELD MARGIN	6%	4%	10%	8%	10%	50%	10%	7%	14%	8%	2%	14%	0%	10%	10%
EFA CATCH CROP	20%	24%	10%	22%	11%	0%	5%	10%	4%	9%	27%	4%	100%	6%	8%
EFA Hedge 100%	0%	2%	5%	7%	6%	0%	6%	1%	12%	5%	0%	12%	0%	6%	7%
EFA Buffer	10%	1%	4%	3%	6%	0%	4%	3%	5%	7%	1%	4%	0%	6%	5%
EFA Green Cover	13%	14%	3%	5%	1%	0%	7%	9%	6%	4%	2%	3%	0%	6%	5%
EFA Hedge 50%	0%	1%	1%	4%	4%	0%	5%	0%	9%	1%	0%	9%	0%	3%	3%



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Further research in the RESAS Strategic Research Programme 2022-27, in the [Land Use Transformations](#) (C3-JHI-1) and [Land Reform](#) (E3-JHI-1) projects.

Land Use Transformations - [Storymaps Collection](#), with [Land Use Change Scenarios](#), [Adding Farm Structure to Land Use Change](#), [Peatlands and Payments](#), [Updating Peatland Condition Mapping](#), [Updating Land Capability for Agriculture](#) and [Climatic Water Balance in Scotland](#).

Website for [Agrometeorological Indicators](#) across the UK under current and future conditions.

The [Review of Land Ownership Data in Scotland](#).

Previous related analyses are from the Hutton Land Systems Research Team website - <https://ics.hutton.ac.uk/research/land-systems-research-team/>

The sets of slides and maps generated in Agriculture Policy analysis from 2010 onwards are available from - <https://ics.hutton.ac.uk/research/land-systems-research-team/cap-analysis/>

For woodland expansion analysis see - [online mapping](#) and [paper](#).

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