





#### Welsh Government



# Potential economic effects of the Sustainable Farming Scheme

**Phase 4 Universal Actions Modelling Results** 

**December 2023** 



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# Phase 4 Universal Actions Modelling Results

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### December 2023

Pareto Consulting

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#### 1 INTRODUCTION

- The Welsh Government commissioned research by ADAS, Pareto Consulting, SRUC and University College Dublin to estimate the potential economic effects of elements of the proposed Sustainable Farming Scheme (SFS) across Wales in terms of agricultural land and labour use, farm output and farm incomes. Phases 1, 2 and 3 of the research collated and analysed physical and financial data to construct a model of Welsh agriculture that was then used in Phase 4 to simulate the effects of proposed Universal Actions (UA) under the SFS.
- 2. The following Tables summarise the Phase 4 modelling results. Results include aggregate expenditure, output and farm income alongside values for the average (median and mean) farm. Future Optional and Collaborative SFS elements are not modelled, meaning that estimated SFS UA budget expenditure is necessarily lower than under the baseline Basic Payment Scheme (BPS). Budget comparability is, however, approximated by also modelling a separate top-up to the UA payment to return all farms to at least their baseline level of funding. All results are purely illustrative, exploring potential effects to inform policy decisions that have yet to be taken with respect to actual payment rates and policy requirements.
- 3. The purpose of the modelling undertaken and reported here was to estimate upper-bound effects of the SFS. Consequently, 100% uptake was assumed regardless of payment rates and only first-order, static impacts were considered rather than allowing for second-order, dynamic responses by farms in terms of further adjustments to farming enterprise mixes and/or management intensity. As such, estimated impacts on farm output and income are indicative of worst-case outcomes. Second-order, dynamic adjustments and estimation of uptake rates have been explored in parallel work under the Environment and Rural Affairs Monitoring & Modelling Programme (ERAMMP) Integrated Modelling Platform (IMP) (see <a href="https://erammp.wales/en">https://erammp.wales/en</a>).
- 4. The Phase 4 model generates estimates for individual farm businesses, with Tables summarising the aggregate distribution of results across farms. Results relate to illustrative flat-rate payment combinations derived from earlier Phase 3 estimates of costs incurred and income foregone across Welsh farms under SFS UA. The specific payment combinations considered are:
  - £91/ha for semi-natural habitats, £93/ha for woodland, and £28/ha for other (overall median rates from Phase 3);
  - £222/ha for semi-natural habitats, £283/ha for woodland, and £42/ha for other (overall 75<sup>th</sup> percentiles from Phase 3);
  - £91/ha for semi-natural habitats, £420/ha for woodland, and £28/ha for other (a mix, including current woodland payment rates); and
  - £91/ha for semi-natural habitats, £283/ha for woodland, and £42/ha for other (a mix).
- 5. In each case, semi-natural habitat payments are made only on semi-natural land (newly created and existing, including environmental designations and buffers but excluding commons), woodland payments are made only on woodland (newly created and existing), and other UA payments (e.g. for planning and reporting) are made only on non-habitat, non-woodland areas. Given heterogeneity across farms, flat-rate payments under-compensate for UA compliance costs on some farms and over-compensate on other farms.
- 6. For each payment rate combination, results are presented by farm type, region and size across three Tables (a to c). Tables 3a to 6c present financial results that vary with payment rates. For example, median and mean values plus aggregate expenditure under different UA measures and aggregate Farm Business Income (FBI) with and without the top-up. By

- contrast, Tables 1a to 2c present values that do not vary with payment rates, reflecting assumed 100% uptake under all scenarios i.e. the possible effect of different payment rates on uptake is not considered.
- 7. The Tables present a mix of population level aggregate totals and percentages plus values for the median farm alongside mean values (the two averages differ markedly due to unevenness in underlying distributions). The population modelled was of farm businesses currently in receipt of support payments with a Standard Output of at least €25k and which could be matched to Farm Business Survey (FBS) data to infer financial performance metrics required to estimate income effects. This excludes certain specialist farm types (e.g. pig, poultry, horticulture) as well as a large number of very small farms. The modelled sub-set of farms represents c.84% of total utilised agricultural area, c.89% of Standard Output and c.93% of total grazing livestock units on all Welsh farms in receipt of current support payments.

Table 1a: Estimated semi-natural and woodland area, relative to BPS baseline under any SFS payment rates, by farm type (fully modelled farms only)

	Arable (232)	LFA Dairy (893)	Lowland Dairy (621)	Lowland grazing (1133)	Mixed/ other (324)	Mixed grazing (2795)	Specialist beef SDA (549)	Specialist sheep (2227)	All (8774)
Semi-natural created (ha)	1.3k	5.1k	4.7k	4.2k	1.5k	6.1k	0.8k	2.0k	25.7k
% change	27.7%	26.3%	31.4%	18.6%	14.8%	6.2%	2.5%	1.0%	6.3%
Median; Mean per farm (ha)	3.8; 5.5	4.7; 5.7	6.4; 7.6	2.9; 3.7	2.8; 4.6	0.1; 2.2	0.0; 1.4	0.0; 0.9	0.8; 2.9
Woodland created (ha)	0.9k	3.2k	2.5k	2.9k	1.1k	7.8k	1.6k	8.2k	28.2k
% change	49.7%	64.2%	77.6%	54.7%	43.3%	44.8%	35.3%	37.3%	45.6%
Median; Mean per farm (ha)	2.9, 4.0	2.8, 3.6	3.3, 4.0	1.6, 2.5	2, 3.4	1.6, 2.8	1, 2.9	1.7, 3.7	1.8, 3.2
Semi-natural retained (ha)	4.6k	19.3k	15.1k	22.5k	10.0k	99.4k	31.8k	203.0k	405.8k
% change	0%	0%	0%	0%	0%	0%	0%	0%	0%
Median; Mean per farm (ha)	9.5; 19.8	8.3; 21.7	9.7; 24.4	7.2; 19.8	13.1; 30.8	14.1; 35.6	21.2; 57.9	39.1; 91.1	16.1; 46.2
Woodland retained (ha)	1.9k	5.0k	3.2k	5.2k	2.5k	17.4k	4.5k	22.1k	61.8k
% change	0%	0%	0%	0%	0%	0%	0%	0%	0%
Median; Mean per farm (ha)	3.1, 8.1	2.8, 5.6	1.7, 5.2	1.2, 4.6	3.4, 7.8	3.0, 6.2	4.0, 8.2	5.4, 9.9	3.1, 7.0

NB: medians for component elements will not necessarily sum to median totals since the median farm may differ for each individual component

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Table 1b: Estimated semi-natural and woodland area, relative to BPS baseline under any SFS payment rates, by region (fully modelled farms only)

	Carmarthenshire (1254)	Ceredigion (850)	NE Wales (1353)	NW Wales (1277)	Pembrokeshire (813)	Powys (2168)	South Wales (1059)	AII (8774)
Semi-natural created (ha)	3.3k	2.6k	5.2k	3.1k	3.3k	4.5k	3.6k	25.7k
% change	12.5%	6.4%	8.6%	2.9%	16.0%	4.0%	9.8%	6.3%
Median; Mean per farm (ha)	1.2; 2.6	1.3; 3.1	2.5; 3.8	0.0; 2.4	2.3; 4.1	0.0; 2.1	1.1; 3.4	0.8; 2.9
Woodland created (ha)	3.0k	3.5k	4.1k	5.3k	2.9k	6.8k	2.6k	28.2k
% change	34.1%	76.1%	52.9%	66.5%	52.2%	35.9%	31.4%	45.6%
Median; Mean per farm (ha)	1.5; 2.4	2.8; 4.1	2; 3.0	2.4; 4.2	2.3; 3.6	1.6; 3.1	0.7; 2.4	1.8; 3.2
Semi-natural retained (ha)	26.3k	41.5k	60.3k	105.1k	20.9k	115.k	36.7k	405.8k
% change	0%	0%	0%	0%	0%	0%	0%	0%
Median; Mean per farm (ha)	10.8; 21.	14.8; 48.8	10.5; 44.6	29.9; 82.3	12.6; 25.7	24.; 53.	14.5; 34.7	16.1; 46.2
Woodland retained (ha)	8.7k	4.6k	7.8k	8.0k	5.6k	19.0k	8.2k	61.8k
% change	0%	0%	0%	0%	0%	0%	0%	0%
Median; Mean per farm (ha)	3.8; 6.9	2.6; 5.4	2.0; 5.7	1.2; 6.3	2.7; 6.9	5.1; 8.7	3.4; 7.7	3.1; 7.0

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Table 1c: Estimated semi-natural and woodland area, relative to BPS baseline under any SFS payment rates, by farm size (fully modelled farms only)

	Small (2664)	Medium (3323)	Large (1320)	Very Large (1467)	All (8774)
Semi-natural created (ha)	3.8k	6.8k	4.5k	10.6k	25.7k
% change	4.9%	4.3%	4.8%	13.5%	6.3%
Median; Mean per farm (ha)	0.0; 1.4	0.0; 2.0	0.6; 3.4	5.9; 7.2	0.8; 2.9
Woodland created (ha)	5.0k	9.7k	5.9k	7.6k	28.2k
% change	41.9%	41.2%	42.0%	62.0%	45.6%
Median; Mean per farm (ha)	1.0; 1.9	1.8; 2.9	3.0; 4.5	3.7; 5.2	1.8; 3.2
Semi-natural retained (ha)	77.7k	157.3k	92.1k	78.7k	405.8k
% change	0%	0%	0%	0%	0%
Median; Mean per farm (ha)	11.2; 29.2	19.3; 47.3	27.8; 69.7	14.9; 53.7	16.1; 46.2
Woodland retained (ha)	12.0k	23.6k	14.0k	12.2k	61.8k
% change	0%	0%	0%	0%	0%
Median; Mean per farm (ha)	2.0; 4.5	3.5; 7.1	5.0; 10.6	3.5; 8.3	3.1; 7.0

- Tables 1a to 1c show the estimated areas of new semi-natural habitat (26k ha) and woodland (28 kha) created to meet the 10% threshold target.
- This is in addition to the larger areas of existing semi-natural habitat (406k ha) and existing on-farm woodland (62k ha) retained. Existing areas woodland is subject to new management requirements, as is much existing semi-natural habitat (i.e. stocking density restrictions).
- 10. Habitat creation is unevenly distributed across farm types, with upland farms (apart from LFA dairy) generally having to create less habitat than lowland farms, particularly lowland dairy. Woodland creation is more evenly distributed but lowland dairy is again most affected.
- 11. Variation by farm region and farm size is apparent, but possibly largely reflects underlying farm types. For example, the geographical concentration of lowland dairying and the fact that lowland dairy farms are typically economically larger businesses.

Table 2a: Estimated output and cost effects of compliance with SFS UA requirements, relative to BPS baseline under any SFS payment rates, by farm type (fully modelled farms only)

	Arable (232)	LFA Dairy (893)	Lowland Dairy (621)	Lowland grazing (1133)	Mixed/ other (324)	Mixed grazing (2795)	Specialist beef SDA (549)	Specialist sheep (2227)	All (8774)
Livestock reduction (GLU)	-0.8k	-22.5k	-22.6k	-10.9k	-2.8k	-27.2k	-4.2k	-31.3k	-122.2k
% change	-13.8%	-10.6%	-12.4%	-9.8%	-9.5%	-9.5%	-8.6%	-12.2%	-10.8%
Median, Mean per farm (GLU)	0.0; -3.3	-14.7; -25.2	-18.8; -36.3	-4.9; -9.6	-3.3; -8.5	-5.0; -9.7	-3.2; -7.7	-5.5; -14.0	-5.9; -13.9
Output reduction (£)	-£1.0m	-£38.0m	-£40.1m	-£7.7m	-£2.4m	-£17.3m	-£2.6m	-£16.3m	-£125.3m
% change	-1.7%	-11.3%	-12.5%	-7.8%	-4.4%	-8.1%	-7.0%	-10.9%	-9.9%
Median; Mean per farm (£)	£0.0k; -£4.2k	-£20.4k; -£42.5k	-£30.0k; -£64.5k	-£2.8k; -£6.8k	-£2.8k; -£7.4k	-£2.8k; -£6.2k	-£2.1k; -£4.8k	-£2.7k; -£7.3k	-£3.5k; -£14.3k
GM reduction (£)	-£0.6m	-£21.4m	-£23.3m	-£5.2m	-£1.2m	-£9.8m	-£1.3m	-£8.3m	-£71.2m
% change	-5.8%	-11.2%	-12.7%	-10.1%	-5.7%	-9.2%	-7.5%	-11.8%	-10.9%
Median; Mean per farm (£)	£0.0k; -£2.8k	-£11.3k; -£24.0k	-£17.3k; -£37.5k	-£1.7k; -£4.6k	-£1.2k; -£3.7k	-£1.5k; -£3.5k	-£0.9k; -£2.3k	-£1.2k; -£3.7k	-£1.9k; -£8.1k
Other compliance costs (£)	£0.4m	£1.0m	£0.8m	£1.0m	£0.5m	£3.1m	£0.7m	£3.5m	£10.9m
% change	1.3%	0.6%	0.5%	2.4%	1.6%	2.6%	2.8%	3.8%	1.6%
Median; Mean per farm (£)	£1.3k; £1.6k	£0.9k; £1.2k	£1.1k; £1.3k	£0.8k; £0.9k	£1.1k; £1.4k	£0.9k; £1.1k	£0.9k; £1.3k	£0.9k; £1.6k	£0.9k; £1.2k
BPS reduction (£)	-£5.1m	-£16.9m	-£12.8m	-£17.2m	-£6.9m	-£52.6m	-£12.4m	-£63.3m	-£187.2m
% change	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
Median; Mean per farm (£)	-£19.0k; -£22.2k	-£16.5k; -£18.9k	-£18.1k; -£20.6k	-£13.6k; -£15.1k	-£17.6k; -£21.2k	-£15.5k; -£18.8k	-£17.1k; -£22.6k	-£22.4k; -£28.4k	-£17.1k; -£21.3k
Change in SLR	-73	-474	-497	-228	-88	-494	-76	-634	-2564
% change	-7.8%	-10.6%	-12.9%	-10.1%	-13.7%	-9.8%	-9.1%	-12.5%	-11.4%
Median; Mean per farm (SLR)	-0.09, -0.31	-0.32, -0.53	-0.4, -0.80	-0.11, -0.20	-0.12, -0.27	-0.1, -0.18	-0.0, -0.14	-0.13, -0.28	-0.13, -0.29

NB: medians for component elements will not necessarily sum to median totals since the median farm may differ for each individual component

Table 2b: Estimated output and cost effects of compliance with SFS UA requirements, relative to BPS baseline under any SFS payment rates, by region (fully modelled farms only)

	Carmarthenshire (1254)	Ceredigion (850)	NE Wales (1353)	NW Wales (1277)	Pembrokeshire (813)	Powys (2168)	South Wales (1059)	All (8774)
Livestock reduction (GLU)	-13.4k	-11.5k	-21.6k	-23.2k	-12.6k	-27.4k	-12.6k	-122.2k
% change	-8.4%	-10.8%	-11.9%	-15.2%	-9.0%	-9.8%	-11.2%	-10.8%
Median; Mean per farm (GLU)	-4.2; -10.7	-7.0; -13.5	-6.8; -15.9	-9.8; -18.2	-5.8; -15.5	-4.9; -12.6	-4.1; -11.9	-5.9; -13.9
Output reduction (£)	-£17.1m	-£11.4m	-£24.5m	-£19.3m	-£18.6m	-£21.7m	-£12.8m	-£125.3m
% change	-8.4%	-9.2%	-11.4%	-13.4%	-8.3%	-9.8%	-9.1%	-9.9%
Median; Mean per farm (£)	-£3.0k; -£13.6k	-£4.8k; -£13.4k	-£4.5k; -£18.1k	-£5.2k; -£15.1k	-£4.8k; -£22.9k	-£2.6k; -£10.0k	-£2.6k; -£12.1k	-£3.5k; -£14.3k
GM reduction (£)	-£9.9m	-£6.3m	-£13.4m	-£10.7m	-£11.3m	-£12.0m	-£7.5m	-£71.2m
% change	-8.9%	-9.8%	-12.3%	-14.5%	-9.5%	-11.3%	-11.0%	-10.9%
Median; Mean per farm (£)	-£1.7k; -£7.9k	-£2.6k; -£7.4k	-£2.3k; -£9.9k	-£2.7k; -£8.4k	-£2.9k; -£13.9k	-£1.3k; -£5.5k	-£1.3k; -£7.1k	-£1.9k; -£8.1k
Other compliance costs (£)	£1.2m	£1.3m	£1.7m	£1.9m	£1.0m	£2.7m	£1.1m	£10.9m
% change	1.1%	1.9%	1.4%	2.4%	0.9%	2.1%	1.6%	1.6%
Median; Mean per farm (£)	£0.8k; £1.0k	£1.0k; £1.5k	£0.8k; £1.2k	£1.0k; £1.5k	£1.0k; £1.3k	£0.8k; £1.2k	£0.9k; £1.1k	£0.9k; £1.2k
BPS reduction (£)	-£21.5m	-£17.1m	-£28.6m	-£30.2m	-£15.8m	-£52.7m	-£21.5m	-£187.2m
% change	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
Median; Mean per farm (£)	-£15.0k; -£17.1k	-£15.9k; -£20.1k	-£16.3k; -£21.1k	-£17.9k; -£23.7k	-£16.5k; -£19.4k	-£19.7k; -£24.3k	-£16.9k; -£20.3k	-£17.1k; -£21.3k
Change in SLR	-275	-220	-463	-442	-288	-579	-297	-2564
% change	-8.7%	-10.6%	-12.7%	-14.9%	-10.1%	-10.6%	-13.1%	-11.4%
Median; Mean per farm (SLR)	0.09,-0.22	-0.13, -0.26	-0.15, -0.34	-0.18, -0.35	-0.15, -0.35	-0.12, -0.27	-0.12, -0.28	-0.13, -0.29

Table 2c: Estimated output and cost effects of compliance with SFS UA requirements, relative to BPS baseline under any SFS payment rates, by farm size (fully modelled farms only)

	Small (2664)	Medium (3323)	Large (1320)	Very Large (1467)	All (8774)
Livestock reduction (GLU)	-10.0k	-31.2k	-25.0k	-56.1k	-122.2k
% change	-9.0%	-10.2%	-10.8%	-11.6%	-10.8%
Median, Mean per farm (GLU)	-2.1; -3.7	-5.8; -9.4	-13; -18.9	-21.8; -38.2	-5.9; -13.9
Output reduction (£)	-£5.9m	-£19.7m	-£17.3m	-£82.5m	-£125.3m
% change	-6.2%	-7.7%	-8.7%	-11.5%	-9.9%
Median; Mean per farm (£)	-£1.2k; -£2.2k	-£3.4k; -£5.9k	-£8.0k; -£13.1k	-£27.7k; -£56.2k	-£3.5k; -£14.3k
GM reduction (£)	-£3.2m	-£10.7m	-£9.8m	-£47.5m	-£71.2m
% change	-7.6%	-9.3%	-10.2%	-11.9%	-10.9%
Median; Mean per farm (£)	-£0.6k; -£1.2k	-£1.7k; -£3.2k	-£4.6k; -£7.4k	-£15.9k; -£32.4k	-£1.9k; -£8.1k
Other compliance costs (£)	£2.3m	£4.0m	£2.2m	£2.5m	£10.9m
% change	4.1%	2.8%	1.9%	0.6%	1.6%
Median; Mean per farm (£)	£0.7k; £0.9k	£0.9k; £1.2k	£1.2k; £1.6k	£1.2k; £1.7k	£0.9k; £1.2k
BPS reduction (£)	-£37.3m	-£69.2m	-£38.6m	-£42.2m	-£187.2m
% change	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
Median; Mean per farm (£)	-£12.9k; -£14.0k	-£17.8k; -£20.8k	-£24.5k; -£29.2k	-£21.3k; -£28.7k	-£17.1k; -£21.3k
Change in SLR	-206	-621	-511	-1226	-2564
% change	-9.6%	-10.7%	-11.5%	-12.2%	-11.4%
Median; Mean per farm (SLR)	-0.05, -0.08	-0.13, -0.19	-0.28, -0.39	-0.51, -0.84	-0.13, -0.29

Size expressed in terms of European Size Units (ESUs) related to output rather than area, meaning that a farm with a smaller physical area but a bigger turnover will be classed as a bigger business than a farm with a larger physical footprint but lower turnover. The Welsh size classes used are: Small => 8 and <40 ESU; Medium => 40 and <100 ESU; Large => 100 and <200 ESU; Very large => 200 ESU; 8 ESU is equivalent to €25k of Standard Output.

- 12. Absolute median values and aggregate percentage changes for livestock numbers, outputs and Gross Margins (GM) generally increase with farm size. Again, lowland and LFA dairy are most affected.
- 13. An exception is the relative impact of other (i.e. not income foregone) compliance costs such as those incurred through producing farm plans and reporting data. The fixed lump sum elements of these represents a greater proportionate increase in business costs for smaller farms, despite their absolute median and mean values being lower.
- 14. Percentage labour changes are relatively evenly distributed but increase in absolute terms with farm size, reflecting output changes.
- 15. Labour usage is estimated in terms of Standard Labour Requirements (SLRs), assuming 1900 working hours in a year and specified (standard) time inputs for managing different types of crops and livestock.
- 16. SLRs do not necessarily portray actual labour usage since (e.g.) many farmers work more than 1900 hours in a year, time spent on individual tasks can vary widely, and coefficients for individual activities are somewhat dated. Nonetheless, SLRs do offer a basis for estimating the direction and magnitude of change in labour associated with farming activities.

Table 3a: Estimated expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £91 semi-natural, £93 woodland, £28 other, by farm type (fully modelled farms only)

	Arable (232)	LFA Dairy (893)	Lowland Dairy (621)	Lowland grazing (1133)	Mixed/ other (324)	Mixed grazing (2795)	Specialist beef SDA (549)	Specialist sheep (2227)	All (8774)
SFS semi-nat payment (£)	£0.5m	£2.2m	£1.8m	£2.4m	£1.0m	£9.6m	£3.0m	£18.7m	£39.3m
Median; Mean per farm (£)	£1.5k; £2.3k	£1.2k; £2.5k	£1.6k; £2.9k	£1.0k; £2.1k	£1.7k; £3.2k	£1.5k; £3.4k	£2.0k; £5.4k	£3.6k; £8.4k	£1.8k; £4.5k
SFS woodland payment (£)	£0.3m	£0.8m	£0.5m	£0.8m	£0.3m	£2.3m	£0.6m	£2.8m	£8.4m
Median; Mean per farm (£)	£0.7k; £1.1k	£0.6k; £0.9k	£0.6k; £0.9k	£0.4k; £0.7k	£0.7k; £1.0k	£0.6k; £0.8k	£0.7k; £1.0k	£0.9k; £1.3k	£0.6k; £1.0k
SFS other payment (£)	£0.8m	£2.3m	£1.8m	£2.2m	£1.0m	£6.4m	£1.5m	£6.8m	£22.7m
Median; Mean per farm (£)	£2.8k; £3.5k	£2.1k; £2.6k	£2.2k; £2.9k	£1.5k; £1.9k	£2.2k; £3.0k	£1.8k; £2.3k	£2.0k; £2.7k	£2.3k; £3.0k	£1.9k; £2.6k
SFS total (£)	£1.6m	£5.3m	£4.1m	£5.4m	£2.3m	£18.4m	£5.0m	£28.3m	£70.4m
% farms with £ SFS < costs	15.9%	85.2%	90.7%	47.2%	29.3%	32.2%	18.4%	12.1%	37.2%
Median; Mean per farm (£)	£5.3k; £7.0k	£4.3k; £5.9k	£5.2k; £6.6k	£3.3k; £4.7k	£4.9k; £7.2k	£4.3k; £6.6k	£5.2k; £9.1k	£7.8k; £12.7k	£4.9k; £8.0k
FBI under SFS alone (£)	-£4.5m	-£34.1m	-£32.8m	-£18.0m	-£6.2m	-£47.1m	-£9.3m	-£46.8m	-£199.0m
% change	-29.7%	-65.3%	-71.3%	-97.1%	-91.9%	-109.2%	-199.2%	-96.8%	-84.6%
Median; Mean per farm (£)	-£15.1k; -£19.6k	-£25.1k; -£38.2k	-£32.4k; -£52.8k	-£13.3k; -£15.9k	-£15.1k; -£19.1k	-£14.2k; -£16.9k	-£14.7k; -£17.0k	-£16.9k; -£21.0k	-£16.1k; -£22.7k
% farms with FBI loss	99.6%	100.0%	99.8%	99.6%	100.0%	99.8%	99.8%	99.6%	99.8%
Top-up payment (£)	£3.5m	£11.6m	£8.7m	£12.0m	£4.5m	£34.3m	£7.4m	£35.2m	£117.3m
Median; Mean per farm (£)	£13.1k; £15.2k	£12.0k; £13.0k	£12.6k; £14.0k	£10.3k; £10.6k	£12.4k; £13.9k	£11.1k; £12.3k	£11.5k; £13.5k	£13.4k; £15.8k	£11.8k; £13.4k
FBI with top-up (£)	-£1.0m	-£22.5m	-£24.1m	-£6.0m	-£1.7m	-£12.8m	-£1.9m	-£11.6m	-£81.6m
% change	-6.6%	-43.0%	-52.4%	-32.3%	-24.7%	-29.8%	-41.3%	-24.0%	-34.5%
Median; Mean per farm (£)	-£1.7k; -£4.4k	-£12.4k; -£25.2k	-£18.2k; -£38.8k	-£2.5k; -£5.3k	-£2.3k; -£5.1k	-£2.5k; -£4.6k	-£2.2k; -£3.5k	-£2.4k; -£5.2k	-£3.0k; -£9.3k
% farms with FBS loss	98.7%	99.7%	99.5%	99.2%	100.0%	98.5%	99.5%	99.6%	99.2%

Table 3b: Estimated expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £91 semi-natural, £93 woodland, £28 other, by region (fully modelled farms only)

	Carmarthenshire (1254)	Ceredigion (850)	NE Wales (1353)	NW Wales (1277)	Pembrokeshire (813)	Powys (2168)	South Wales (1059)	All (8774)
SFS semi-nat payment (£)	£2.7m	£4.0m	£6.0m	£9.8m	£2.2m	£10.9m	£3.7m	£39.3m
Median; Mean per farm (£)	£1.2k; £2.1k	£1.8k; £4.7k	£1.3k; £4.4k	£3.0k; £7.7k	£1.6k; £2.7k	£2.3k; £5.0k	£1.6k; £3.5k	£1.8k; £4.5k
SFS woodland payment (£)	£1.1m	£0.8m	£1.1m	£1.2m	£0.8m	£2.4m	£1.0m	£8.4m
Median; Mean per farm (£)	£0.6k; £0.9k	£0.6k; £0.9k	£0.5k; £0.8k	£0.5k; £1.0k	£0.6k; £1.0k	£0.8k; £1.1k	£0.6k; £0.9k	£0.6k; £1.0k
SFS other payment (£)	£2.9m	£1.8m	£3.4m	£2.8m	£2.3m	£6.6m	£2.9m	£22.7m
Median; Mean per farm (£)	£1.8k; £2.3k	£1.8k; £2.2k	£1.8k; £2.5k	£1.6k; £2.2k	£2.1k; £2.8k	£2.3k; £3.1k	£2.0k; £2.7k	£1.9k; £2.6k
SFS total (£)	£6.7m	£6.6m	£10.5m	£13.9m	£5.3m	£19.9m	£7.5m	£70.4m
% farms with £ SFS < costs	43.1%	45.2%	43.0%	41.7%	55.4%	20.8%	30.5%	37.2%
Median; Mean per farm (£)	£4.0k; £5.3k	£4.5k; £7.8k	£4.3k; £7.7k	£5.7k; £10.9k	£4.5k; £6.5k	£6.2k; £9.2k	£4.8k; £7.1k	£4.9k; £8.0k
FBI under SFS alone (£)	-£25.9m	-£18.1m	-£33.1m	-£29.0m	-£22.8m	-£47.3m	-£22.4m	-£198.5m
% change	-78.3%	-79.8%	-83.5%	-89.6%	-63.0%	-102.9%	-88.5%	-84.4%
Median; Mean per farm (£)	-£15.2k; -£20.6k	-£16.1k; -£21.3k	-£16.6k; -£24.4k	-£16.6k; -£22.7k	-£17.0k; -£28.0k	-£16.5k; -£21.8k	-£15.1k; -£21.1k	-£16.1k; -£22.6k
% farms with FBS loss	99.8%	100.0%	99.6%	99.8%	99.8%	100.0%	99.3%	99.8%
Top-up payment (£)	£14.8m	£10.5m	£18.2m	£16.4m	£10.7m	£32.8m	£14.0m	£117.3m
Median; Mean per farm (£)	£11.0k; £11.8k	£11.3k; £12.3k	£11.7k; £13.4k	£11.5k; £12.8k	£11.5k; £13.2k	£13.0k; £15.1k	£11.7k; £13.2k	£11.8k; £13.4k
FBI with top-up (£)	-£11.1m	-£7.6m	-£14.9m	-£12.6m	-£12.1m	-£14.5m	-£8.4m	-£81.2m
% change	-33.5%	-33.6%	-37.6%	-38.9%	-33.4%	-31.6%	-33.2%	-34.5%
Median; Mean per farm (£)	-£2.5k; -£8.8k	-£4.0k; -£9.0k	-£3.3k; -£11.0k	-£4.1k; -£9.9k	-£3.7k; -£14.8k	-£2.2k; -£6.7k	-£2.2k; -£7.9k	-£2.9k; -£9.3k
% farms with FBS loss	99.2%	99.3%	98.6%	99.0%	99.6%	99.6%	99.0%	99.2%

Table 3c: Estimated expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £91 semi-natural, £93 woodland, £28 other, by farm size (fully modelled farms only)

	Small (2664)	Medium (3323)	Large (1320)	Very Large (1467)	All (8774)
SFS semi-nat payment (£)	£7.4m	£14.9m	£8.8m	£8.1m	£39.3m
Median; Mean per farm (£)	£1.1k; £2.8k	£1.9k; £4.5k	£2.8k; £6.7k	£2.1k; £5.5k	£1.8k; £4.5k
SFS woodland payment (£)	£1.6m	£3.1m	£1.9m	£1.8m	£8.4m
Median; Mean per farm (£)	£0.4k; £0.6k	£0.7k; £0.9k	£1.0k; £1.4k	£0.8k; £1.3k	£0.6k; £1.0k
SFS other payment (£)	£3.8m	£8.0m	£5.0m	£5.9m	£22.7m
Median; Mean per farm (£)	£1.2k; £1.4k	£2.0k; £2.4k	£3.4k; £3.8k	£2.9k; £4.0k	£1.9k; £2.6k
SFS total (£)	£12.8m	£26.0m	£15.7m	£15.9m	£70.4m
% farms with £ SFS < costs	23.1%	29.0%	38.3%	80.3%	37.2%
Median; Mean per farm (£)	£3.1k; £4.8k	£5.2k; £7.8k	£7.9k; £11.9k	£6.6k; £10.8k	£4.9k; £8.0k
FBI under SFS alone (£)	-£30.0m	-£57.9m	-£34.7m	-£76.0m	-£198.5m
% change	-84.2%	-91.5%	-177.1%	-66.8%	-84.4%
Median; Mean per farm (£)	-£11.1k; -£11.2k	-£16.2k; -£17.4k	-£24.2k; -£26.3k	-£35.3k; -£51.8k	-£16.1k; -£22.6k
% farms with FBS loss	99.7%	99.8%	99.7%	100.0%	99.8%
Top-up payment (£)	£24.6m	£43.3m	£23.1m	£26.3m	£117.3m
Median; Mean per farm (£)	£9.1k; £9.2k	£12.1k; £13.0k	£15.9k; £17.5k	£14.5k; £17.9k	£11.8k; £13.4k
FBI with top-up (£)	-£5.3m	-£14.6m	-£11.6m	-£49.7m	-£81.2m
% change	-28.1%	-23.0%	-31.5%	-43.7%	-34.5%
Median; Mean per farm (£)	-£1.4k; -£2.0k	-£2.8k; -£4.4k	-£5.9k; -£8.8k	-£17.2k; -£33.9k	-£2.9k; -£9.3k
% farms with FBS loss	98.4%	99.5%	99.2%	99.9%	99.2%

Size expressed in terms of European Size Units (ESUs) related to output rather than area, meaning that a farm with a smaller physical area but a bigger turnover will be classed as a bigger business than a farm with a larger physical footprint but lower turnover. The Welsh size classes used are: Small => 8 and <40 ESU; Medium => 40 and <100 ESU; Large => 100 and <200 ESU; Very large => 200 ESU; 8 ESU is equivalent to €25k of Standard Output.

- 17. Tables 3a to 3c show that total UA payments under this scenario would (because future Optional and Collaborative elements of the SFS are not included and commons are excluded) be lower than under BPS, although the top-up restores the same level.
- 18. Together with the additional compliance costs and reduction in aggregate Gross Margin noted in Tables 2a to 2c, lower support expenditure results in a marked decline in FBI.
- 19. The addition of a top-up payment to bring each farm's total support back to its previous BPS level reduces but cannot eliminate the drop in FBI. This is because even if UA payments compensate perfectly (which they do not) for compliance costs, UA compliance costs were not incurred under the baseline BPS and hence represent a reduction in the net contribution of payments to FBI for any given level of funding.
- 20. Absolute median losses are highest for lowland and then LFA dairy farms, but percentage changes are highest for upland and lowland grazing farms – reflecting the relatively greater importance of public support to their income position.
- 21. Results are more evenly distributed regionally, but larger farms have higher absolute median losses.
- 22. The magnitude of estimated income losses indicates the likely pressure for structural adjustments in pursuit of productivity gains and/or alternative income sources.

Table 4a: Estimated expenditure and income effects of compliance with all SFS requirements, relative to BPS baseline under SFS payment rates of £222 semi-natural, £283 woodland, £42 other, by farm type (fully modelled farms only)

	Arable (232)	LFA Dairy (893)	Lowland Dairy (621)	Lowland grazing (1133)	Mixed/ other (324)	Mixed grazing (2795)	Specialist beef SDA (549)	Specialist sheep (2227)	All (8774)
SFS semi-nat payment (£)	£1.3m	£5.4m	£4.4m	£5.9m	£2.5m	£23.4m	£7.2m	£45.5m	£95.8m
Median; Mean per farm (£)	£3.6k; £5.6k	£3.0k; £6.1k	£3.9k; £7.1k	£2.5k; £5.2k	£4.0k; £7.9k	£3.6k; £8.4k	£4.9k; £13.2k	£8.8k; £20.4k	£4.3k; £10.9k
SFS woodland payment (£)	£0.8m	£2.3m	£1.6m	£2.3m	£1.0m	£7.1m	£1.7m	£8.6m	£25.5m
Median; Mean per farm (£)	£2.2k; £3.4k	£1.9k; £2.6k	£1.8k; £2.6k	£1.2k; £2.0k	£2.1k; £3.1k	£1.8k; £2.5k	£2.0k; £3.1k	£2.7k; £3.9k	£1.9k; £2.9k
SFS other payment (£)	£1.2m	£3.4m	£2.7m	£3.3m	£1.5m	£9.7m	£2.2m	£10.2m	£34.1m
Median; Mean per farm (£)	£4.2k; £5.3k	£3.1k; £3.9k	£3.4k; £4.3k	£2.2k; £2.9k	£3.3k; £4.5k	£2.7k; £3.5k	£2.9k; £4.1k	£3.4k; £4.6k	£2.9k; £3.9k
SFS total (£)	£3.3m	£11.2m	£8.7m	£11.5m	£5.0m	£40.2m	£11.2m	£64.3m	£155.4m
% farms with £ SFS < costs	6.5%	69.9%	79.2%	15.5%	4.6%	5.4%	2.6%	1.3%	17.3%
Median; Mean per farm (£)	£10.6k; £14.4k	£8.9k; £12.5k	£10.7k; £14.0k	£6.6k; £10.1k	£10.4k; £15.5k	£9.1k; £14.4k	£10.8k; £20.4k	£16.7k; £28.9k	£10.3k; £17.7k
FBI under SFS alone (£)	-£2.4m	-£28.2m	-£28.2m	-£11.9m	-£3.5m	-£25.3m	-£3.2m	-£10.8m	-£113.5m
% change	-15.5%	-54.0%	-61.4%	-64.1%	-52.2%	-58.6%	-67.7%	-22.4%	-48.3%
Median; Mean per farm (£)	-£9.5k; -£10.3k	-£20.5k; -£31.6k	-£27.2k; -£45.4k	-£9.5k; -£10.5k	-£10.2k; -£10.8k	-£9.0k; -£9.1k	-£7.6k; -£5.8k	-£8.1k; -£4.9k	-£9.8k; -£12.9k
% farms with FBS loss	96.6%	99.6%	99.0%	96.9%	92.6%	93.1%	86.9%	80.5%	91.2%
Top-up payment (£)	£2.0m	£6.4m	£4.6m	£6.9m	£2.3m	£16.4m	£3.0m	£12.6m	£54.1m
Median; Mean per farm (£)	£8.3k; £8.4k	£7.6k; £7.1k	£8.0k; £7.4k	£6.2k; £6.1k	£7.2k; £7.1k	£5.8k; £5.9k	£4.7k; £5.4k	£5.1k; £5.6k	£6.1k; £6.2k
FBI with top-up (£)	-£0.4m	-£21.9m	-£23.6m	-£5.0m	-£1.2m	-£8.9m	-£0.2m	£1.7m	-£59.4m
% change	-2.7%	-41.8%	-51.4%	-26.8%	-17.9%	-20.5%	-4.5%	3.6%	-25.3%
Median; Mean per farm (£)	-£1.3k; -£1.8k	-£12.4k; -£24.5k	-£18.2k; -£38.1k	-£2.4k; -£4.4k	-£2.2k; -£3.7k	-£2.1k; -£3.2k	-£1.6k; -£0.4k	-£1.5k; £0.8k	-£2.4k; -£6.8k
% farms with FBS loss	96.1%	99.2%	98.7%	96.7%	92.6%	92.0%	86.7%	80.5%	90.7%

Table 4b: Estimated expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £222 semi-natural, £283 woodland, £42 other, by region (fully modelled farms only)

	Carmarthenshire (1254)	Ceredigion (850)	NE Wales (1353)	NW Wales (1277)	Pembrokeshire (813)	Powys (2168)	South Wales (1059)	All (8774)
SFS semi-nat payment (£)	£6.6m	£9.8m	£14.5m	£24.0m	£5.4m	£26.5m	£8.9m	£95.8m
Median; Mean per farm (£)	£2.9k; £5.2k	£4.3k; £11.5k	£3.2k; £10.7k	£7.4k; £18.8k	£3.8k; £6.6k	£5.7k; £12.2k	£3.9k; £8.4k	£4.3k; £10.9k
SFS woodland payment (£)	£3.3m	£2.3m	£3.4m	£3.8m	£2.4m	£7.3m	£3.0m	£25.5m
Median; Mean per farm (£)	£1.9k; £2.6k	£1.9k; £2.7k	£1.6k; £2.5k	£1.7k; £3.0k	£1.9k; £3.0k	£2.4k; £3.4k	£1.8k; £2.9k	£1.9k; £2.9k
SFS other payment (£)	£4.4m	£2.8m	£5.1m	£4.2m	£3.4m	£10.0m	£4.3m	£34.1m
Median; Mean per farm (£)	£2.8k; £3.5k	£2.6k; £3.2k	£2.8k; £3.8k	£2.4k; £3.3k	£3.1k; £4.2k	£3.5k; £4.6k	£3.1k; £4.1k	£2.9k; £3.9k
SFS total (£)	£14.2m	£14.8m	£23.0m	£32.0m	£11.2m	£43.8m	£16.3m	£155.4m
% farms with £ SFS < costs	25.7%	20.4%	22.4%	14.5%	30.3%	6.8%	13.2%	17.3%
Median; Mean per farm (£)	£8.3k; £11.4k	£9.7k; £17.5k	£9.1k; £17.0k	£12.3k; £25.1k	£9.5k; £13.8k	£12.8k; £20.2k	£9.9k; £15.4k	£10.3k; £17.7k
FBI under SFS alone (£)	-£18.3m	-£9.9m	-£20.5m	-£10.9m	-£16.9m	-£23.5m	-£13.6m	-£113.5m
% change	-55.4%	-43.5%	-51.8%	-33.6%	-46.6%	-51.0%	-53.9%	-48.3%
Median; Mean per farm (£)	-£10.1k; -£14.6k	-£9.5k; -£11.6k	-£10.4k; -£15.2k	-£8.3k; -£8.5k	-£11.4k; -£20.7k	-£9.5k; -£10.8k	-£9.8k; -£12.9k	-£9.8k; -£12.9k
% farms with FBS loss	95.9%	91.1%	93.3%	80.9%	96.3%	90.8%	92.2%	91.2%
Top-up payment (£)	£8.0m	£4.5m	£8.9m	£5.8m	£5.5m	£14.2m	£7.1m	£54.1m
Median; Mean per farm (£)	£6.5k; £6.4k	£5.4k; £5.3k	£6.8k; £6.6k	£4.1k; £4.6k	£6.4k; £6.8k	£6.5k; £6.5k	£7.0k; £6.7k	£6.1k; £6.2k
FBI with top-up (£)	-£10.3m	-£5.3m	-£11.6m	-£5.1m	-£11.3m	-£9.3m	-£6.5m	-£59.4m
% change	-31.2%	-23.5%	-29.3%	-15.7%	-31.4%	-20.1%	-25.8%	-25.3%
Median; Mean per farm (£)	-£2.4k; -£8.2k	-£3.2k; -£6.3k	-£2.7k; -£8.6k	-£2.7k; -£4.0k	-£3.5k; -£14.0k	-£1.8k; -£4.3k	-£2.0k; -£6.2k	-£2.4k; -£6.8k
% farms with FBS loss	95.3%	90.6%	92.5%	80.3%	96.3%	90.4%	91.9%	90.7%
					•			

Table 4c: Estimated expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £222 semi-natural, £283 woodland, £42 other, by farm size (fully modelled farms only)

	Small (2664)	Medium (3323)	Large (1320)	Very Large (1467)	All (8774)
SFS semi-nat payment (£)	£18.1m	£36.4m	£21.4m	£19.8m	£95.8m
Median; Mean per farm (£)	£2.8k; £6.8k	£4.6k; £11.0k	£6.7k; £16.2k	£5.1k; £13.5k	£4.3k; £10.9k
SFS woodland payment (£)	£4.8m	£9.4m	£5.6m	£5.6m	£25.5m
Median; Mean per farm (£)	£1.3k; £1.8k	£2.1k; £2.8k	£3.1k; £4.3k	£2.6k; £3.8k	£1.9k; £2.9k
SFS other payment (£)	£5.7m	£12.0m	£7.6m	£8.9m	£34.1m
Median; Mean per farm (£)	£1.8k; £2.1k	£3.1k; £3.6k	£5.0k; £5.7k	£4.4k; £6.1k	£2.9k; £3.9k
SFS total (£)	£28.6m	£57.8m	£34.6m	£34.3m	£155.4m
% farms with £ SFS < costs	3.0%	7.4%	17.7%	65.4%	17.3%
Median; Mean per farm (£)	£6.5k; £10.7k	£10.8k; £17.4k	£16.3k; £26.2k	£13.4k; £23.4k	£10.3k; £17.7k
FBI under SFS alone (£)	-£14.2m	-£26.0m	-£15.7m	-£57.6m	-£113.5m
% change	-83.7%	-41.2%	-38.2%	-50.6%	-48.3%
Median; Mean per farm (£)	-£6.7k; -£5.3k	-£9.8k; -£7.8k	-£13.5k; -£11.9k	-£26.3k; -£39.3k	-£9.8k; -£12.9k
% farms with FBS loss	90.9%	89.5%	89.5%	96.9%	91.2%
Top-up payment (£)	£12.6m	£19.9m	£9.3m	£12.2m	£54.1m
Median; Mean per farm (£)	£4.7k; £4.7k	£6.4k; £6.0k	£7.3k; £7.1k	£8.3k; £8.3k	£6.1k; £6.2k
FBI with top-up (£)	-£1.5m	-£6.1m	-£6.4m	-£45.4m	-£59.4m
% change	-9.1%	-9.7%	-15.5%	-39.9%	-25.3%
Median; Mean per farm (£)	-£1.2k; -£0.6k	-£2.3k; -£1.8k	-£4.5k; -£4.8k	-£16.2k; -£31.0k	-£2.4k; -£6.8k
% farms with FBS loss	89.8%	89.3%	89.2%	96.8%	90.7%

Size expressed in terms of European Size Units (ESUs) related to output rather than area, meaning that a farm with a smaller physical area but a bigger turnover will be classed as a bigger business than a farm with a larger physical footprint but lower turnover. The Welsh size classes used are: Small => 8 and <40 ESU; Medium => 40 and <100 ESU; Large => 100 and <200 ESU; Very large => 200 ESU; 8 ESU is equivalent to €25k of Standard Output.

- 23. Relative to Tables 3a to 3c, Tables 4a to 4c show that (as expected) higher payment rates raise expenditure closer to the previous BPS level and reduce the drop in FBI.
- 24. However, FBI is still lower than in the BPS baseline and remains so even with the addition of a top-up payment.
- 25. The overall reduction in absolute and percentage losses with the top-up relative to Tables 3a to 3c reflects the fact that the SFS plus BPS top-up modestly increases overall public expenditure. This is because all farms who receive less money under SFS compared with BPS receive the top-up, but farms gaining under the SFS do not have such gains withdrawn (hence specialist sheep gain in aggregate with the top-up)
- 26. As with Tables 3a to 3c, lowland and LFA dairy farms face the largest FBI losses, as do larger farms in general.
- 27. It is important to note that SFS payments constrained by the same overall budget as the previous BPS cannot recreate the same aggregate FBI as under the BPS. This is because income forgone and other costs incurred through SFS compliance represent a loss that has to be subtracted from the net value of support payments e.g. farms compensated exactly for the additional income foregone and costs incurred through SFS compliance will still suffer a reduction in FBI since the previous BPS regime did not impose the same income forgone or costs incurred (hence % FBI losses and % of farms suffering losses are high).

Table 5a: Estimated expenditure and income effects of compliance with all SFS requirements, relative to BPS baseline under SFS payment rates of £91 semi-natural, £420 woodland, £28 other, by farm type (fully modelled farms only)

Median; Mean per farm (£)         £1.5k; £2.3k         £1.2k; £2.5k         £1.6k; £2.9k         £1.0k; £2.1k         £1.7k; £3.2k         £1.5k; £3.4k         £2.0k; £5.4k         £3.6k; £8.           SFS woodland payment (£)         £1.2m         £3.4m         £2.4m         £3.4m         £1.5m         £10.6m         £2.5m         £12.7m           Median; Mean per farm (£)         £3.2k; £5.1k         £2.9k; £3.9k         £1.8m         £2.2m         £1.0m         £6.4m         £1.5m         £6.8m           SFS other payment (£)         £0.8m         £2.3m         £1.8m         £2.2m         £1.0m         £6.4m         £1.5m         £6.8m           Median; Mean per farm (£)         £2.8k; £3.5k         £2.1k; £2.6k         £2.2k; £2.9k         £1.5k; £1.9k         £2.2k; £3.0k         £1.8k; £2.3k         £2.0k; £2.7k         £2.3k; £3.5k         £2.8k; £3.5k         £2.1k; £2.9k         £1.5k; £1.9k         £2.2k; £3.0k         £1.8k; £2.3k         £2.0k; £2.7k         £2.3k; £3.5k         £2.8k; £3.5k         £2.8k; £2.9k         £1.5k; £1.9k         £2.2k; £3.0k         £1.8k; £2.3k         £2.0k; £2.7k         £2.3k; £3.5k         £2.8k; £3.5k         £	neep All (8774)	Specialist sheep (2227)	Specialist beef SDA (549)	Mixed grazing (2795)	Mixed/ other (324)	Lowland grazing (1133)	Lowland Dairy (621)	LFA Dairy (893)	Arable (232)	
SFS woodland payment (£)         £1.2m         £3.4m         £2.4m         £3.4m         £1.5m         £10.6m         £2.5m         £12.7m           Median; Mean per farm (£)         £3.2k; £5.1k         £2.9k; £3.9k         £2.6k; £3.9k         £1.8k; £3.0k         £3.2k; £4.7k         £2.6k; £3.8k         £3.0k; £4.6k         £4.0k; £5.           SFS other payment (£)         £0.8m         £2.3m         £1.8m         £2.2m         £1.0m         £6.4m         £1.5m         £6.8m           Median; Mean per farm (£)         £2.8k; £3.5k         £2.1k; £2.6k         £2.2k; £2.9k         £1.5k; £1.9k         £2.2k; £3.0k         £1.8k; £2.3k         £2.0k; £2.7k         £2.3k; £3.           SFS total (£)         £2.5m         £8.0m         £6.0m         £3.5m         £2.6.6m         £7.0m         £38.2m           % farms with £ SFS < costs	£39.3m	£18.7m	£3.0m	£9.6m	£1.0m	£2.4m	£1.8m	£2.2m	£0.5m	SFS semi-nat payment (£)
Median; Mean per farm (£)         £3.2k; £5.1k         £2.9k; £3.9k         £2.6k; £3.9k         £1.8k; £3.0k         £3.2k; £4.7k         £2.6k; £3.8k         £3.0k; £4.6k         £4.0k; £5.           SFS other payment (£)         £0.8m         £2.3m         £1.8m         £2.2m         £1.0m         £6.4m         £1.5m         £6.8m           Median; Mean per farm (£)         £2.8k; £3.5k         £2.1k; £2.6k         £2.2k; £2.9k         £1.5k; £1.9k         £2.2k; £3.0k         £1.8k; £2.3k         £2.0k; £2.7k         £2.3k; £3.           SFS total (£)         £2.5m         £8.0m         £6.0m         £3.5m         £2.6m         £7.0m         £38.2m           % farms with £ SFS < costs	4k £1.8k; £4.5k	£3.6k; £8.4k	£2.0k; £5.4k	£1.5k; £3.4k	£1.7k; £3.2k	£1.0k; £2.1k	£1.6k; £2.9k	£1.2k; £2.5k	£1.5k; £2.3k	Median; Mean per farm (£)
SFS other payment (£)         £0.8m         £2.3m         £1.8m         £2.2m         £1.0m         £6.4m         £1.5m         £6.8m           Median; Mean per farm (£)         £2.8k; £3.5k         £2.1k; £2.6k         £2.2k; £2.9k         £1.5k; £1.9k         £2.2k; £3.0k         £1.8k; £2.3k         £2.0k; £2.7k         £2.3k; £3.           SFS total (£)         £2.5m         £8.0m         £6.0m         £8.0m         £3.5m         £26.6m         £7.0m         £38.2m           % farms with £ SFS < costs	£37.8m	£12.7m	£2.5m	£10.6m	£1.5m	£3.4m	£2.4m	£3.4m	£1.2m	SFS woodland payment (£)
Median; Mean per farm (£)         £2.8k; £3.5k         £2.1k; £2.6k         £2.2k; £2.9k         £1.5k; £1.9k         £2.2k; £3.0k         £1.8k; £2.3k         £2.0k; £2.7k         £2.3k; £3.           SFS total (£)         £2.5m         £8.0m         £6.0m         £8.0m         £3.5m         £26.6m         £7.0m         £38.2m           % farms with £ SFS < costs	7k £2.9k; £4.3k	£4.0k; £5.7k	£3.0k; £4.6k	£2.6k; £3.8k	£3.2k; £4.7k	£1.8k; £3.0k	£2.6k; £3.9k	£2.9k; £3.9k	£3.2k; £5.1k	Median; Mean per farm (£)
SFS total (£)         £2.5m         £8.0m         £6.0m         £8.0m         £3.5m         £26.6m         £7.0m         £38.2m           % farms with £ SFS < costs	£22.7m	£6.8m	£1.5m	£6.4m	£1.0m	£2.2m	£1.8m	£2.3m	£0.8m	SFS other payment (£)
% farms with £ SFS < costs         10.3%         77.5%         85.5%         29.9%         13.6%         16.3%         7.3%         5.7%           Median; Mean per farm (£)         £7.8k; £11.0k         £6.7k; £8.9k         £7.5k; £9.6k         £4.8k; £7.1k         £7.4k; £10.9k         £6.4k; £9.5k         £7.6k; £12.7k         £11.2k; £17           FBI under SFS alone (£)         -£3.2m         -£31.4m         -£30.9m         -£15.4m         -£5.0m         -£38.9m         -£7.4m         -£36.9m           % change         -20.7%         -60.2%         -67.3%         -82.8%         -74.4%         -90.1%         -157.0%         -76.3%           Median; Mean per farm (£)         -£11.5k; -£13.7k         -£22.7k; -£35.2k         -£29.5k; -£49.8k         -£11.6k; -£13.6k         -£12.7k; -£15.4k         -£11.8k; -£13.9k         -£11.3k; -£13.4k         -£13.6k; -£1           % farms with FBS loss         97.8%         99.7%         99.5%         98.9%         97.5%         98.6%         97.6%         98.6%           Top-up payment (£)         £2.7m         £9.1m         £7.0m         £9.9m         £3.5m         £26.6m         £5.6m         £26.2m           Median; Mean per farm (£)         £10.3k; £11.7k         £9.6k; £10.1k         £10.2k; £11.2k         £8.6k; £8.8k <t< td=""><td>0k £1.9k; £2.6k</td><td>£2.3k; £3.0k</td><td>£2.0k; £2.7k</td><td>£1.8k; £2.3k</td><td>£2.2k; £3.0k</td><td>£1.5k; £1.9k</td><td>£2.2k; £2.9k</td><td>£2.1k; £2.6k</td><td>£2.8k; £3.5k</td><td>Median; Mean per farm (£)</td></t<>	0k £1.9k; £2.6k	£2.3k; £3.0k	£2.0k; £2.7k	£1.8k; £2.3k	£2.2k; £3.0k	£1.5k; £1.9k	£2.2k; £2.9k	£2.1k; £2.6k	£2.8k; £3.5k	Median; Mean per farm (£)
Median; Mean per farm (£)         £7.8k; £11.0k         £6.7k; £8.9k         £7.5k; £9.6k         £4.8k; £7.1k         £7.4k; £10.9k         £6.4k; £9.5k         £7.6k; £12.7k         £11.2k; £17.8k           FBI under SFS alone (£)         -£3.2m         -£31.4m         -£30.9m         -£15.4m         -£5.0m         -£38.9m         -£7.4m         -£36.9m           % change         -20.7%         -60.2%         -67.3%         -82.8%         -74.4%         -90.1%         -157.0%         -76.3%           Median; Mean per farm (£)         -£11.5k; -£13.7k         -£22.7k; -£35.2k         -£29.5k; -£49.8k         -£11.6k; -£13.6k         -£12.7k; -£15.4k         -£11.8k; -£13.9k         -£11.3k; -£13.4k         -£13.6k; -£1           % farms with FBS loss         97.8%         99.7%         99.5%         98.9%         97.5%         98.6%         97.6%         98.6%           Top-up payment (£)         £2.7m         £9.1m         £7.0m         £9.9m         £3.5m         £26.6m         £5.6m         £26.2m           Median; Mean per farm (£)         £10.3k; £11.7k         £9.6k; £10.1k         £10.2k; £11.2k         £8.6k; £8.8k         £9.9k; £10.8k         £8.9k; £9.5k         £8.9k; £10.1k         £10.2k; £11	£99.8m	£38.2m	£7.0m	£26.6m	£3.5m	£8.0m	£6.0m	£8.0m	£2.5m	SFS total (£)
FBI under SFS alone (£)  -£3.2m  -£31.4m  -£30.9m  -£15.4m  -£5.0m  -£38.9m  -£7.4m  -£36.9m  % change  -20.7%  -60.2%  -60.2%  -67.3%  -82.8%  -74.4%  -90.1%  -157.0%  -157.0%  -76.3%  Median; Mean per farm (£)  -£11.5k; -£13.7k  -£22.7k; -£35.2k  -£29.5k; -£49.8k  -£11.6k; -£13.6k  -£12.7k; -£15.4k  -£11.8k; -£13.9k  -£11.3k; -£13.4k  -£13.6k; -£1  % farms with FBS loss  97.8%  99.7%  99.5%  98.9%  97.5%  98.6%  97.6%  98.6%  Top-up payment (£)  £2.7m  £9.1m  £7.0m  £9.9m  £3.5m  £26.6m  £5.6m  £26.2m  Median; Mean per farm (£)  £10.3k; £11.7k  £9.6k; £10.1k  £10.2k; £11.2k  £8.6k; £8.8k  £9.9k; £10.8k  £8.9k; £9.5k  £8.9k; £10.1k  £10.2k; £11	25.7%	5.7%	7.3%	16.3%	13.6%	29.9%	85.5%	77.5%	10.3%	% farms with £ SFS < costs
% change         -20.7%         -60.2%         -67.3%         -82.8%         -74.4%         -90.1%         -157.0%         -76.3%           Median; Mean per farm (£)         -£11.5k; -£13.7k         -£22.7k; -£35.2k         -£29.5k; -£49.8k         -£11.6k; -£13.6k         -£12.7k; -£15.4k         -£11.8k; -£13.9k         -£11.3k; -£13.4k         -£13.6k; -£1           % farms with FBS loss         97.8%         99.7%         99.5%         98.9%         97.5%         98.6%         97.6%         98.6%           Top-up payment (£)         £2.7m         £9.1m         £7.0m         £9.9m         £3.5m         £26.6m         £5.6m         £26.2m           Median; Mean per farm (£)         £10.3k; £11.7k         £9.6k; £10.1k         £10.2k; £11.2k         £8.6k; £8.8k         £9.9k; £10.8k         £8.9k; £9.5k         £8.9k; £10.1k         £10.2k; £11	7.1k £7.3k; £11.4k	£11.2k; £17.1k	£7.6k; £12.7k	£6.4k; £9.5k	£7.4k; £10.9k	£4.8k; £7.1k	£7.5k; £9.6k	£6.7k; £8.9k	£7.8k; £11.0k	Median; Mean per farm (£)
Median; Mean per farm (£)         -£11.5k; -£13.7k         -£22.7k; -£35.2k         -£29.5k; -£49.8k         -£11.6k; -£13.6k         -£12.7k; -£15.4k         -£11.8k; -£13.9k         -£11.3k; -£13.4k         -£13.6k; -£1           % farms with FBS loss         97.8%         99.7%         99.5%         98.9%         97.5%         98.6%         97.6%         98.6%           Top-up payment (£)         £2.7m         £9.1m         £7.0m         £9.9m         £3.5m         £26.6m         £5.6m         £26.2m           Median; Mean per farm (£)         £10.3k; £11.7k         £9.6k; £10.1k         £10.2k; £11.2k         £8.6k; £8.8k         £9.9k; £10.8k         £8.9k; £9.5k         £8.9k; £10.1k         £10.2k; £11	-£169.1m	-£36.9m	-£7.4m	-£38.9m	-£5.0m	-£15.4m	-£30.9m	-£31.4m	-£3.2m	FBI under SFS alone (£)
% farms with FBS loss       97.8%       99.7%       99.5%       98.9%       97.5%       98.6%       97.6%       98.6%         Top-up payment (£)       £2.7m       £9.1m       £7.0m       £9.9m       £3.5m       £26.6m       £5.6m       £26.2m         Median; Mean per farm (£)       £10.3k; £11.7k       £9.6k; £10.1k       £10.2k; £11.2k       £8.6k; £8.8k       £9.9k; £10.8k       £8.9k; £9.5k       £8.9k; £10.1k       £10.2k; £11	-71.9%	-76.3%	-157.0%	-90.1%	-74.4%	-82.8%	-67.3%	-60.2%	-20.7%	% change
Top-up payment (£)         £2.7m         £9.1m         £7.0m         £9.9m         £3.5m         £26.6m         £5.6m         £26.2m           Median; Mean per farm (£)         £10.3k; £11.7k         £9.6k; £10.1k         £10.2k; £11.2k         £8.6k; £8.8k         £9.9k; £10.8k         £8.9k; £9.5k         £8.9k; £10.1k         £10.2k; £11	6.6k -£13.3k; -£19.3k	-£13.6k; -£16.6k	-£11.3k; -£13.4k	-£11.8k; -£13.9k	-£12.7k; -£15.4k	-£11.6k; -£13.6k	-£29.5k; -£49.8k	-£22.7k; -£35.2k	-£11.5k; -£13.7k	Median; Mean per farm (£)
Median; Mean per farm (£) £10.3k; £11.7k £9.6k; £10.1k £10.2k; £11.2k £8.6k; £8.8k £9.9k; £10.8k £8.9k; £9.5k £8.9k; £10.1k £10.2k; £11	98.7%	98.6%	97.6%	98.6%	97.5%	98.9%	99.5%	99.7%	97.8%	% farms with FBS loss
	£90.5m	£26.2m	£5.6m	£26.6m	£3.5m	£9.9m	£7.0m	£9.1m	£2.7m	Top-up payment (£)
FBI with top-up (£) -£0.5m -£22.4m -£24.0m -£5.5m -£1.5m -£12.3m -£1.8m -£10.8m	1.7k £9.4k; £10.3k	£10.2k; £11.7k	£8.9k; £10.1k	£8.9k; £9.5k	£9.9k; £10.8k	£8.6k; £8.8k	£10.2k; £11.2k	£9.6k; £10.1k	£10.3k; £11.7k	Median; Mean per farm (£)
	-£78.6m	-£10.8m	-£1.8m	-£12.3m	-£1.5m	-£5.5m	-£24.0m	-£22.4m	-£0.5m	FBI with top-up (£)
% change -3.0% -42.8% -52.1% -29.4% -22.2% -28.4% -38.3% -22.2%	-33.4%	-22.2%	-38.3%	-28.4%	-22.2%	-29.4%	-52.1%	-42.8%	-3.0%	% change
Median; Mean per farm (£) -£1.4k; -£2.0k -£12.4k; -£25.1k -£18.2k; -£38.6k -£2.5k; -£4.8k -£2.3k; -£4.6k -£2.4k; -£4.4k -£2.0k; -£3.3k -£2.3k; -£4	.8k -£2.9k; -£9.0k	-£2.3k; -£4.8k	-£2.0k; -£3.3k	-£2.4k; -£4.4k	-£2.3k; -£4.6k	-£2.5k; -£4.8k	-£18.2k; -£38.6k	-£12.4k; -£25.1k	-£1.4k; -£2.0k	Median; Mean per farm (£)
% farms with FBS loss 97.4% 99.3% 99.2% 98.6% 97.5% 97.3% 97.3% 98.6%	98.2%	98.6%	97.3%	97.3%	97.5%	98.6%	99.2%	99.3%	97.4%	% farms with FBS loss

Table 5b: Estimated expenditure and income expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £91 seminatural, £420 woodland, £28 other, by region (fully modelled farms only)

	Carmarthenshire (1254)	Ceredigion (850)	NE Wales (1353)	NW Wales (1277)	Pembrokeshire (813)	Powys (2168)	South Wales (1059)	All (8774)
SFS semi-nat payment (£)	£2.7m	£4.0m	£6.0m	£9.8m	£2.2m	£10.9m	£3.7m	£39.3m
Median; Mean per farm (£)	£1.2k; £2.1k	£1.8k; £4.7k	£1.3k; £4.4k	£3.0k; £7.7k	£1.6k; £2.7k	£2.3k; £5.0k	£1.6k; £3.5k	£1.8k; £4.5k
SFS woodland payment (£)	£4.9m	£3.4m	£5.0m	£5.6m	£3.6m	£10.8m	£4.5m	£37.8m
Median; Mean per farm (£)	£2.8k; £3.9k	£2.9k; £4.0k	£2.3k; £3.7k	£2.4k; £4.4k	£2.9k; £4.4k	£3.6k; £5.0k	£2.7k; £4.3k	£2.9k; £4.3k
SFS other payment (£)	£2.9m	£1.8m	£3.4m	£2.8m	£2.3m	£6.6m	£2.9m	£22.7m
Median; Mean per farm (£)	£1.8k; £2.3k	£1.8k; £2.2k	£1.8k; £2.5k	£1.6k; £2.2k	£2.1k; £2.8k	£2.3k; £3.1k	£2.0k; £2.7k	£1.9k; £2.6k
SFS total (£)	£10.5m	£9.2m	£14.4m	£18.2m	£8.0m	£28.3m	£11.1m	£99.8m
% farms with £ SFS < costs	31.5%	29.3%	30.9%	29.0%	42.2%	12.2%	20.2%	25.7%
Median; Mean per farm (£)	£6.2k; £8.4k	£6.9k; £10.9k	£6.4k; £10.6k	£7.8k; £14.3k	£6.8k; £9.9k	£9.2k; £13.1k	£7.1k; £10.4k	£7.3k; £11.4k
FBI under SFS alone (£)	-£22.0m	-£15.5m	-£29.2m	-£24.6m	-£20.0m	-£38.9m	-£18.9m	-£169.1m
% change	-66.7%	-68.2%	-73.7%	-76.1%	-55.3%	-84.6%	-74.6%	-71.9%
Median; Mean per farm (£)	-£12.3k; -£17.6k	-£13.3k; -£18.2k	-£14.2k; -£21.6k	-£14.0k; -£19.3k	-£14.5k; -£24.6k	-£13.3k; -£17.9k	-£12.7k; -£17.8k	-£13.3k; -£19.3k
% farms with FBS loss	98.5%	99.5%	98.9%	98.6%	98.8%	98.8%	98.1%	98.7%
Top-up payment (£)	£11.3m	£7.9m	£14.8m	£12.5m	£8.3m	£24.8m	£10.9m	£90.5m
Median; Mean per farm (£)	£8.7k; £9.0k	£9.0k; £9.3k	£9.5k; £10.9k	£9.1k; £9.8k	£9.2k; £10.3k	£10.0k; £11.4k	£9.5k; £10.3k	£9.4k; £10.3k
FBI with top-up (£)	-£10.8m	-£7.6m	-£14.4m	-£12.1m	-£11.7m	-£14.1m	-£8.0m	-£78.6m
% change	-32.7%	-33.3%	-36.4%	-37.4%	-32.2%	-30.6%	-31.5%	-33.4%
Median; Mean per farm (£)	-£2.5k; -£8.6k	-£4.0k; -£8.9k	-£3.3k; -£10.7k	-£3.9k; -£9.5k	-£3.7k; -£14.3k	-£2.2k; -£6.5k	-£2.2k; -£7.5k	-£2.9k; -£9.0k
% farms with FBS loss	97.8%	98.8%	98.0%	97.8%	98.8%	98.3%	97.7%	98.2%

Table 5c: Estimated expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £91 semi-natural, £420 woodland, £28 other, by farm size (fully modelled farms only)

	Small (2664)	Medium (3323)	Large (1320)	Very Large (1467)	All (8774)
SFS semi-nat payment (£)	£7.4m	£14.9m	£8.8m	£8.1m	£39.3m
Median; Mean per farm (£)	£1.1k; £2.8k	£1.9k; £4.5k	£2.8k; £6.7k	£2.1k; £5.5k	£1.8k; £4.5k
SFS woodland payment (£)	£7.1m	£14.0m	£8.4m	£8.3m	£37.8m
Median; Mean per farm (£)	£1.9k; £2.7k	£3.1k; £4.2k	£4.6k; £6.3k	£3.8k; £5.7k	£2.9k; £4.3k
SFS other payment (£)	£3.8m	£8.0m	£5.0m	£5.9m	£22.7m
Median; Mean per farm (£)	£1.2k; £1.4k	£2.0k; £2.4k	£3.4k; £3.8k	£2.9k; £4.0k	£1.9k; £2.6k
SFS total (£)	£18.3m	£36.9m	£22.2m	£22.4m	£99.8m
% farms with £ SFS < costs	11.4%	16.2%	25.8%	73.0%	25.7%
Median; Mean per farm (£)	£4.7k; £6.9k	£7.7k; £11.1k	£11.8k; £16.8k	£9.6k; £15.2k	£7.3k; £11.4k
FBI under SFS alone (£)	-£24.4m	-£47.0m	-£28.2m	-£69.6m	-£169.1m
% change	-144.2%	-74.3%	-68.4%	-61.1%	-71.9%
Median; Mean per farm (£)	-£9.2k; -£9.2k	-£13.5k; -£14.1k	-£19.8k; -£21.3k	-£31.3k; -£47.4k	-£13.3k; -£19.3k
% farms with FBS loss	98.5%	98.3%	98.9%	99.7%	98.7%
Top-up payment (£)	£19.6m	£33.5m	£17.3m	£20.1m	£90.5m
Median; Mean per farm (£)	£7.2k; £7.4k	£9.5k; £10.1k	£11.7k; £13.1k	£11.4k; £13.7k	£9.4k; £10.3k
FBI with top-up (£)	-£4.8m	-£13.4m	-£10.8m	-£49.5m	-£78.6m
% change	-28.4%	-21.3%	-26.3%	-43.5%	-33.4%
Median; Mean per farm (£)	-£1.4k; -£1.8k	-£2.8k; -£4.0k	-£5.8k; -£8.2k	-£17.2k; -£33.7k	-£2.9k; -£9.0k
% farms with FBS loss	97.2%	98.1%	98.6%	99.6%	98.2%

Size expressed in terms of European Size Units (ESUs) related to output rather than area, meaning that a farm with a smaller physical area but a bigger turnover will be classed as a bigger business than a farm with a larger physical footprint but lower turnover. The Welsh size classes used are: Small => 8 and <40 ESU; Medium => 40 and <100 ESU; Large => 100 and <200 ESU; Very large => 200 ESU; 8 ESU is equivalent to €25k of Standard Output.

- 28. Relative to Tables 3a to 3c, Tables 5a to 5c show that higher woodland payment rates do increase SFS expenditure and reduce the drop in FBI, but to a lesser extent than the higher payment rates across the board for everything in Tables 4a to 4c.
- 29. Including the top-up payment improves the position relative to Tables 3a to 3c but less so than in Tables 4a to 4c.
- 30. As with Tables 3a to 3c and 4a to 4c, lowland and LFA dairy farms face the largest FBI losses, as do larger farms in general.
- 31. As with all scenarios, it should be noted that the underlying heterogeneity in farms' costs of complying with SFS UA measures (particularly with respect to income foregone) means that flat-payment rates unavoidably lead to some farms receiving less than they incur in costs whilst others receive more.
- 32. Farms facing net compliance losses may be less likely to enrol in the SFS, implying that actual expenditure may be lower than estimated here with assumed 100% uptake. However, lower uptake would weaken the reach and leverage of the SFS over land use.

Table 6a: Estimated expenditure and income effects of compliance with all SFS requirements, relative to BPS baseline under any SFS payment rates of £91 semi-natural, £283 woodland, £42 other, by farm type (fully modelled farms only)

	Arable (232)	LFA Dairy (893)	Lowland Dairy (621)	Lowland grazing (1133)	Mixed/ other (324)	Mixed grazing (2795)	Specialist beef SDA (549)	Specialist sheep (2227)	All (8774)
SFS semi-nat payment (£)	£0.5m	£2.2m	£1.8m	£2.4m	£1.0m	£9.6m	£3.0m	£18.7m	£39.3m
Median; Mean per farm (£)	£1.5k; £2.3k	£1.2k; £2.5k	£1.6k; £2.9k	£1.0k; £2.1k	£1.7k; £3.2k	£1.5k; £3.4k	£2.0k; £5.4k	£3.6k; £8.4k	£1.8k; £4.5k
SFS woodland payment (£)	£0.8m	£2.3m	£1.6m	£2.3m	£1.0m	£7.1m	£1.7m	£8.6m	£25.5m
Median; Mean per farm (£)	£2.2k; £3.4k	£1.9k; £2.6k	£1.8k; £2.6k	£1.2k; £2.0k	£2.1k; £3.1k	£1.8k; £2.5k	£2.0k; £3.1k	£2.7k; £3.9k	£1.9k; £2.9k
SFS other payment (£)	£1.2m	£3.4m	£2.7m	£3.3m	£1.5m	£9.7m	£2.2m	£10.2m	£34.1m
Median; Mean per farm (£)	£4.2k; £5.3k	£3.1k; £3.9k	£3.4k; £4.3k	£2.2k; £2.9k	£3.3k; £4.5k	£2.7k; £3.5k	£2.9k; £4.1k	£3.4k; £4.6k	£2.9k; £3.9k
SFS total (£)	£2.6m	£8.0m	£6.1m	£8.0m	£3.5m	£26.4m	£6.9m	£37.4m	£98.8m
% farms with £ SFS < costs	9.1%	76.8%	85.5%	27.5%	13.3%	14.9%	7.5%	5.5%	24.8%
Median; Mean per farm (£)	£8.2k; £11.1k	£6.8k; £8.9k	£7.8k; £9.8k	£4.9k; £7.0k	£7.6k; £10.9k	£6.5k; £9.4k	£7.6k; £12.6k	£11.3k; £16.8k	£7.4k; £11.3k
FBI under SFS alone (£)	-£2.8m	-£30.4m	-£30.0m	-£14.4m	-£4.6m	-£36.1m	-£6.8m	-£34.2m	-£159.1m
% change	-18.1%	-58.1%	-65.3%	-77.5%	-67.8%	-83.6%	-144.2%	-70.7%	-67.7%
Median; Mean per farm (£)	-£10.3k; -£12.0k	-£21.5k; -£34.0k	-£28.4k; -£48.3k	-£10.6k; -£12.7k	-£11.5k; -£14.1k	-£10.9k; -£12.9k	-£10.7k; -£12.3k	-£12.8k; -£15.4k	-£12.4k; -£18.1k
% farms with FBS loss	98.3%	99.8%	99.4%	99.0%	97.8%	99.0%	98.4%	99.0%	99.0%
Top-up payment (£)	£2.6m	£9.0m	£6.8m	£9.7m	£3.5m	£26.6m	£5.6m	£26.5m	£90.3m
Median; Mean per farm (£)	£10.2k; £11.4k	£9.6k; £10.1k	£10.2k; £10.9k	£8.5k; £8.6k	£9.9k; £10.7k	£8.9k; £9.5k	£9.0k; £10.2k	£10.3k; £11.9k	£9.4k; £10.3k
FBI with top-up (£)	-£0.8m	-£22.3m	-£23.9m	-£5.6m	-£1.5m	-£11.8m	-£1.6m	-£9.1m	-£76.6m
% change	-5.4%	-42.7%	-52.0%	-30.0%	-22.2%	-27.3%	-34.5%	-18.9%	-32.6%
Median; Mean per farm (£)	-£1.5k; -£3.6k	-£12.4k; -£25.0k	-£18.2k; -£38.5k	-£2.5k; -£4.9k	-£2.3k; -£4.6k	-£2.3k; -£4.2k	-£1.8k; -£2.9k	-£2.0k; -£4.1k	-£2.7k; -£8.7k
% farms with FBS loss	96.1%	99.3%	98.9%	98.1%	96.0%	96.5%	93.3%	96.0%	96.8%
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Table 6b: Estimated expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £91 semi-natural, £283 woodland, £42 other, by region (fully modelled farms only)

	Carmarthenshire (1254)	Ceredigion (850)	NE Wales (1353)	NW Wales (1277)	Pembrokeshire (813)	Powys (2168)	South Wales (1059)	All (8774)
SFS semi-nat payment (£)	£2.7m	£4.0m	£6.0m	£9.8m	£2.2m	£10.9m	£3.7m	£39.3m
Median; Mean per farm (£)	£1.2k; £2.1k	£1.8k; £4.7k	£1.3k; £4.4k	£3.0k; £7.7k	£1.6k; £2.7k	£2.3k; £5.0k	£1.6k; £3.5k	£1.8k; £4.5k
SFS woodland payment (£)	£3.3m	£2.3m	£3.4m	£3.8m	£2.4m	£7.3m	£3.0m	£25.5m
Median; Mean per farm (£)	£1.9k; £2.6k	£1.9k; £2.7k	£1.6k; £2.5k	£1.7k; £3.0k	£1.9k; £3.0k	£2.4k; £3.4k	£1.8k; £2.9k	£1.9k; £2.9k
SFS other payment (£)	£4.4m	£2.8m	£5.1m	£4.2m	£3.4m	£10.0m	£4.3m	£34.1m
Median; Mean per farm (£)	£2.8k; £3.5k	£2.6k; £3.2k	£2.8k; £3.8k	£2.4k; £3.3k	£3.1k; £4.2k	£3.5k; £4.6k	£3.1k; £4.1k	£2.9k; £3.9k
SFS total (£)	£10.4m	£9.1m	£14.4m	£17.8m	£8.0m	£28.1m	£11.0m	£98.8m
% farms with £ SFS < costs	31.3%	28.8%	30.1%	26.9%	40.3%	11.7%	19.4%	24.8%
Median; Mean per farm (£)	£6.2k; £8.3k	£6.9k; £10.7k	£6.6k; £10.7k	£8.0k; £14.0k	£6.9k; £9.8k	£9.2k; £13.0k	£7.2k; £10.4k	£7.4k; £11.3k
FBI under SFS alone (£)	-£21.0m	-£14.3m	-£27.5m	-£23.2m	-£19.0m	-£36.4m	-£17.8m	-£159.1m
% change	-63.5%	-63.3%	-69.3%	-71.6%	-52.6%	-79.2%	-70.2%	-67.7%
Median; Mean per farm (£)	-£11.3k; -£16.7k	-£12.2k; -£16.9k	-£13.0k; -£20.3k	-£12.9k; -£18.1k	-£13.0k; -£23.4k	-£12.5k; -£16.8k	-£11.6k; -£16.8k	-£12.4k; -£18.1k
% farms with FBS loss	98.8%	99.9%	99.0%	98.7%	98.9%	99.3%	98.4%	99.0%
Top-up payment (£)	£11.3m	£8.0m	£14.5m	£12.7m	£8.2m	£24.8m	£10.8m	£90.3m
Median; Mean per farm (£)	£8.8k; £9.0k	£9.0k; £9.5k	£9.5k; £10.7k	£9.3k; £10.0k	£9.2k; £10.1k	£10.1k; £11.4k	£9.5k; £10.2k	£9.4k; £10.3k
FBI with top-up (£)	-£10.8m	-£7.1m	-£14.1m	-£11.4m	-£11.8m	-£13.3m	-£8.1m	-£76.6m
% change	-32.7%	-31.4%	-35.7%	-35.1%	-32.6%	-29.0%	-32.1%	-32.6%
Median; Mean per farm (£)	-£2.5k; -£8.6k	-£3.7k; -£8.4k	-£3.1k; -£10.5k	-£3.5k; -£8.9k	-£3.7k; -£14.5k	-£2.0k; -£6.1k	-£2.2k; -£7.7k	-£2.7k; -£8.7k
% farms with FBS loss	97.0%	97.8%	97.2%	94.8%	98.2%	97.1%	96.2%	96.8%

Table 6c: Estimated expenditure and income effects of compliance with SFS UA requirements, relative to BPS baseline under SFS payment rates of £91 semi-natural, £283 woodland, £42 other, by farm size (fully modelled farms only)

	Small (2664)	Medium (3323)	Large (1320)	Very Large (1467)	All (8774)
SFS semi-nat payment (£)	£7.4m	£14.9m	£8.8m	£8.1m	£39.3m
Median; Mean per farm (£)	£1.1k; £2.8k	£1.9k; £4.5k	£2.8k; £6.7k	£2.1k; £5.5k	£1.8k; £4.5k
SFS woodland payment (£)	£4.8m	£9.4m	£5.6m	£5.6m	£25.5m
Median; Mean per farm (£)	£1.3k; £1.8k	£2.1k; £2.8k	£3.1k; £4.3k	£2.6k; £3.8k	£1.9k; £2.9k
SFS other payment (£)	£5.7m	£12.0m	£7.6m	£8.9m	£34.1m
Median; Mean per farm (£)	£1.8k; £2.1k	£3.1k; £3.6k	£5.0k; £5.7k	£4.4k; £6.1k	£2.9k; £3.9k
SFS total (£)	£17.9m	£36.4m	£22.0m	£22.6m	£98.8m
% farms with £ SFS < costs	10.5%	15.3%	24.8%	71.9%	24.8%
Median; Mean per farm (£)	£4.7k; £6.7k	£7.9k; £10.9k	£12.1k; £16.7k	£9.8k; £15.4k	£7.4k; £11.3k
FBI under SFS alone (£)	-£22.5m	-£43.6m	-£26.2m	-£66.8m	-£159.1m
% change	-133.3%	-68.9%	-63.6%	-58.7%	-67.7%
Median; Mean per farm (£)	-£8.6k; -£8.5k	-£12.5k; -£13.1k	-£18.3k; -£19.9k	-£29.4k; -£45.5k	-£12.4k; -£18.1k
% farms with FBS loss	98.8%	98.7%	99.2%	99.7%	99.0%
Top-up payment (£)	£19.8m	£33.6m	£17.2m	£19.7m	£90.3m
Median; Mean per farm (£)	£7.4k; £7.4k	£9.6k; £10.1k	£11.8k; £13.0k	£11.3k; £13.4k	£9.4k; £10.3k
FBI with top-up (£)	-£4.4m	-£12.6m	-£10.4m	-£49.2m	-£76.6m
% change	-16.3%	-15.8%	-21.9%	-41.4%	-32.6%
Median; Mean per farm (£)	-£1.3k; -£1.7k	-£2.5k; -£3.8k	-£5.5k; -£7.9k	-£17.2k; -£33.5k	-£2.7k; -£8.7k
% farms with FBS loss	95.0%	96.7%	98.0%	99.3%	96.8%
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- 33. Relative to Tables 3a to 3c, Tables 6a to 6c show that higher woodland and other payment rates do increase SFS expenditure and reduce the drop in FBI, but to a lesser extent than the higher payment rates across the board for everything in Tables 4a to 4c.
- 34. Including the top-up payment improves the position relative to Tables 3a to 3c but less so than in Tables 4a to 4c. Results are similar to those in Tables 5a to 5c.
- 35. As with all previous Tables, lowland and LFA dairy farms face the largest FBI losses, as do larger farms in general.
- 36. Similarly, as with previous Tables, across all of the scenarios (which all assume 100% uptake rates), it is apparent that aggregate losses of market-based margins plus the additional compliance costs cannot be compensated for by support payments within a budget similar to that of previous BPS support.
- 37. As with expenditure, less than 100% uptake would also be expected to alter aggregate changes in output, Gross Margin and farm income.

#### 2 SUMMARY

- 38. The selected illustrative £/ha payment rates vary in their magnitude, leading to different levels of illustrative expenditure under each type of SFS UA. For example, £91/ha for semi-natural habitat incurs £39.3m of expenditure, £222/ha incurs £95.8m; £93/ha for woodland incurs £8.4m, £283/ha incurs £25.5m, £420/ha incurs £37.8m; £28/ha for other UA measures incurs £22.7m, £42/ha incurs £34.1m. Total SFS expenditure varies accordingly but is always less than previous BPS expenditure, because actions within the proposed Optional and Collaborative layers of the SFS have not been included in the analysis undertaken.
- 39. Overall, c.26k ha of new semi-natural habitat are created together with c.28k ha of new woodland. Impacts of this vary across individual farms depending on their starting position in terms of land use and financial performance. Upland grazing farms in general require less additional semi-natural habitat to be created than do lowland farms (and LFA dairy). This translates into regional and size variation, at least partially reflecting the underlying distribution of farm types.
- 40. Variation in displacement and baseline financial performance combine to generate illustrative changes to output and Gross Margins at both the farm-level and aggregate level. Again, these are typically highest for dairy farms and lowest for upland grazing farms, with FBI also reflecting payment rates. For example, total FBI falls by £199m (85%) with total SFS UA expenditure of £70m compared to £114m (48%) with expenditure of £155m. Overall output losses of £125m and livestock reductions of 122k GLUs are estimated, being proportionately highest for dairy farms but also for specialist sheep farms (because of stocking limits to maintain and retain the semi-natural habitats). As noted in the introduction, these estimates represent illustrative upper-bounds since they relate to 100% uptake of UA measures and only consider static impacts rather than allowing for dynamic responses.
- 41. Including a top-up payment to ensure each farm receives the same level of funding as under the BPS greatly reduces FBI losses. For example, from £82m (35%) to £59m (25%). However, it does not eliminate FBI losses since the UA measures have incurred additional compliance and displaced agricultural activities, which for some farms equate to costs that exceed the flat-rate payment rates offered, and for all farms represent a reduction in the net value of support payments relative to under the BPS.<sup>1</sup> Future elective elements of the SFS will incur further compliance costs, meaning that even if payments match the BPS the net effect on FBI will be less. As modelled, farmers are being asked to deliver more (e.g. in terms of environmental delivery) for approximately the same level of support funding.
- 42. The illustrative magnitude of the FBI reductions, with or without a top-up payment, highlights the challenge of seeking sufficient dynamic productivity gains and/or alternative income sources to offset estimated losses. Moreover, the scope for dynamic adjustments may be constrained by other policy constraints, such as pollution control regulations. This implies a need for investment in skills and enterprise development, including diversification beyond agriculture, to maintain the livelihoods of current agricultural workers.
- 43. SLR estimates of on-farm labour suggest a decline of 11%, largely reflecting displaced livestock numbers. However, such illustrative estimates do not necessarily imply an actual reduction in on-farm labour since agricultural hours worked often exceed the nominal 1900-hour year. Equally, non-agricultural tasks may increase. For example, Phase 1 analysis implies that management of the new woodland reported here could require c.50 farm-level jobs annually, plus additional labour for initial planting and subsequent harvesting as well as elsewhere in the supply-chain (amounting to c.160 in total on an annualised basis). Hence the number of hours worked and/or nature of tasks undertaken are not necessarily themselves indicative of likely changes in the number of farm-based workers and should be viewed alongside income/livelihood indicators.

<sup>&</sup>lt;sup>1</sup> Some elements of 'other' UA SFS compliance costs may be viewed as also present under the BPS (and/or other regulatory controls), reinforcing that the estimated FBI reductions presented here should be treated as upper-bounds.