### Department for Environment, Food and Rural Affairs

# Cumulative Impact of Forthcoming Regulatory Proposals on the Economics of Farming in England

### May 2013

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# **Overview of impacts**

Estimated annual cost to farms of existing Defra regulation (as at 2011): £590m

Estimated changes to annual costs by 2021 from Defra regulation								
Increase from planned 'Ins'	£11.3m	Of which EU regulations	£9.6m					
Reduction from planned 'Outs'	£40.7m	Of which EU regulations	£0.6m					
Resulting total reduction:	£29.4m							
Equivalent reduction per farm:	£366							

#### Impacts by Sector:

While changes in regulation are expected to reduce costs across English farms as a whole (as a result of the proposed abolition of the Agricultural Wages Board), the poultry sector will experience a rise in costs. This is because the two regulations which result in large cost increases impact mainly or entirely on the poultry sector. The size of cost reduction experienced varies across the other sectors; horticulture and general cropping farms see larger than average falls, grazing livestock and cereals see smaller than average falls.

Effect of new regulations by 2021	Poultry	All other farms	Overall Average
Average net cost per farm per year	£2,423	-£437	-£366
Equivalent % of current farm costs	0.4%	-0.2%	-0.2%
Cost as % of 3-year average farm income	4.1%	-0.8%	-0.7%

#### Coverage:

This analysis deals with costs imposed by 'future' Defra regulation – for the purposes of this note, any regulatory change affecting farm costs in 2012 or later. It estimates the cost to farmers in England only, excluding any impact on other sectors or in the Devolved Administrations. It uses data from 2011 as a baseline for 'current' farm costs. While the headline figures above relate to the increased annual cost in 2021 specifically, the body of this note covers the whole 10-year period from 2012 to 2021.

#### **Benefits:**

Regulations are generally introduced in order to achieve benefits; they are designed so that the total of these benefits is expected to exceed any resulting increases in costs to farmers. For most of the regulations considered in this update there are currently no estimates available which monetise the expected benefits. The most significant of these benefits relate to improved animal welfare and apply to society in general rather than directly to the farmers who bear the costs.

# 1. Executive summary

### Introduction

1.1. This note summarises analysis of the likely economic impacts on the English farming industry of new regulations and changes to existing regulations.

1.2. The analysis focuses on compliance costs and considers farm-specific measures that are likely to have a significant impact on current production costs and farm business incomes over the next decade.

1.3. The figures in this analysis reflect the stage of policy development as at February 2013. Government is committed to reducing the burden of regulation and is therefore constantly reviewing new proposals and considering removing or simplifying existing regulation. For farming in particular, the MacDonald Task Force report made many recommendations that are currently under consideration.

### Effect of regulation on farm costs and incomes

1.4. We estimate that, by 2021, changes that Defra makes to regulations could reduce farm costs by around £30m per year when compared with a baseline of financial year 2011/12<sup>1</sup>. This would represent a drop in annual production costs of about 0.2% for the average farm business, and is equivalent to around 0.7% of current (2011) Farm Business Income; this contrasts with past estimates which showed costs increasing over the years immediately following their publication.

1.5. There is significant uncertainty around any estimate of regulatory costs in either direction; in this case, while the best estimate is for a significant reduction in farm costs, it is still possible that the end result could be a small rise. This reflects the large uncertainty over the level of saving which will occur following the proposed abolition of the Agricultural Wages Board (AWB).

1.6. The effect of regulation on costs varies significantly between sectors, with the small overall reduction concealing contrasting results for different farm types. By 2021 the poultry sector will see an increase in annual costs equivalent to 4% of current Farm Business Income. For horticulture farms, the reduction in costs could be as large as 5% of current income. Other farm types will also see a drop in costs, but it will be considerably smaller than for horticulture farms.

<sup>&</sup>lt;sup>1</sup> Figures in this note are typically based on either financial or agricultural years; these do not coincide perfectly, but describe similar enough time periods that they can be used interchangeably given the uncertainties inherent in this analysis. For convenience, we often simply refer to the calendar year which most closely matches the appropriate financial or agricultural year – in this case, 2011.

1.7. The main driver of this variation is that the new regulations causing the biggest increase in costs affect livestock keepers only and have a particularly strong impact on poultry farms. This increase exceeds savings from the abolition of the AWB for poultry farms, but for all other farm types the AWB effects will dominate.

### **Regulation and charging proposals in context**

1.8. The estimated effect from future changes in regulation falls well within the range of natural year-to-year variation in farm costs; other countries will also have changing regulatory requirements which may act to reduce any impact on UK farming competitiveness. However, regulatory costs are on top of any other fluctuations and the government is committed to working with stakeholders to improve the way it regulates, making savings where possible.

1.9. The overall proportional effect on total farm household incomes will be less marked than on farm business incomes as many farming households have additional sources of income and assets which they may use to help support their businesses. These resources, together with the high asset-value of farm businesses, are likely to continue to contribute to the low levels of indebtedness and the lower rates of bankruptcy and insolvency which are characteristic of farming compared with other sectors.

1.10. There are barriers to evaluating the total burden on farmers from all existing regulation precisely<sup>2</sup>. However, a recent Defra assessment<sup>3</sup> estimates the direct cost to agriculture and forestry from the regulations for which Defra is responsible at around £590m per annum. Our estimate of the cost of compliance with forthcoming regulations would represent a reduction of about 5% in this baseline by 2021.

<sup>&</sup>lt;sup>2</sup> There are various reasons for this. In particular, though, as farmers adapt to regulation over long periods of time it becomes increasingly difficult to identify the point where action taken explicitly to comply with the regulation stops and where standard farming practice (which will have evolved in the context of facilitating compliance with the regulatory landscape, among other influences) begins.

<sup>&</sup>lt;sup>3</sup> www.gov.uk/government/uploads/system/uploads/attachment\_data/file/69226/pb13623-costs-benefits-defra-regulatorystock110816.pdf

# 2. Headline impacts

### Background to the assessment of cumulative impacts

2.1. Assessments of the cumulative impact of new regulatory proposals started in 2005. This update reflects the state of play as at February 2013 with respect to regulatory proposals and the latest Farm Business Survey<sup>4</sup> data, relating to 2011/12. The assessment will continue to be refined and updated as individual measures are developed further.

2.2. All policies are considered against a baseline of 2011 – that is, if a regulation is already in force, its effect will be captured within the Farm Business Survey data that have been used; whereas if it starts (or if regulatory changes cause an increase in costs) in 2012 or later, it is treated as "future" regulation because any impacts will not be reflected in the baseline data (except possibly to the extent that farmers might have anticipated regulatory changes in their business decisions and already incurred some costs).

# Aggregate impact of regulations

2.3. While this note considers the impact of all future changes to regulation and charges on the English farming sector over the next decade, the analysis itself is limited to the more significant proposals for which Defra is responsible. In general, individual regulations have been analysed whenever they have impacts over a certain threshold (>£1m cost/saving per annum for the farming industry as a whole or >£0.1m for any particular farming sector); however, regulations below these thresholds may also be included if considered particularly relevant. Where regulation is proposed but has not yet been developed to the point of producing formal cost estimates (changes to Nitrate Vulnerable Zone regulations, for example), we have not attempted to make any quantitative estimate of impact.

2.4. Initial point estimates of the aggregate costs of these proposals are given in Table 1 with positive figures indicating cost increases to farmers and negative figures representing savings. Annual impacts are illustrated for 2012 and for two years in the next decade showing how different implementation schedules for the various measures result in an initial rise in costs which then turns into an overall saving. The table also shows how the effects differ significantly between arable and livestock farming. More details of the methodology behind the estimates are given in Annex A.

2.5. On top of these costs, there may be regulations introduced by other government departments which also impact on farmers. The only examples of which we are currently aware that will have a marked impact on farming, compared with other sectors, are the EU

<sup>&</sup>lt;sup>4</sup> The Farm Business Survey is an annual survey of about 1,900 farms in England which collects a wide range of physical and financial data.

emission standards for tractors, and cost recovery for meat official controls (overseen by the Department for Transport and the Food Standards Agency respectively). These are expected to cost farmers around £30m by 2017, rising to around £40m by 2021; £30m of this final figure represents the annualisation of £220m of capital investment related to the EU emission standards for tractors<sup>5</sup>. Although the focus of this note is on Defra's regulations and the tables and charts throughout illustrate only these, the effects of regulations from other government departments are also considered in the commentary where appropriate.

2.6. Inevitably, there are great uncertainties surrounding these cost forecasts. Some proposals are at an early stage of development and many will be subject to public consultation on their exact nature and timing; hence the design of regulations, as well as costs and benefits, may evolve over time. During consultation stages, Impact Assessments normally consider a range of options and uncertainties for each proposal so that the range of costs can be very wide; these are refined as final options are agreed. This analysis typically takes the cost figures for the preferred option or a mid-point estimate.

2.7. Even where regulations have been finalised, it is still difficult to establish how much change will be required given uncertainty about the extent to which farms already meet the requirements. In particular, any savings from the abolition of the Agricultural Wages Board (AWB) will depend on how market conditions evolve and on human behaviour so the best estimate of the final impact used here is taken from a particularly wide range of potential outcomes – at one end this includes the possibility that there will be no saving to farmers at all.

2.8. While this note focuses on farmers, some of the regulations will also affect other groups so the net impacts on society as a whole may differ from the figures shown in this analysis. This is particularly relevant to the abolition of the AWB; as a market-liberalising initiative it should enhance sectoral efficiency and tend to increase competitiveness, but it will also have distributional effects for the groups involved. The savings to farmers correspond to a transfer from agricultural workers, whose wages and other terms and conditions will adjust to the new market level as supported by the National Minimum Wage and other statutory provisions which apply to the whole economy.

2.9. The headline figures in Table 1 represent the *initial* impacts arising from compliance and don't incorporate the longer term potential for any cost rises to be mitigated by second round impacts (e.g. possible reductions in input prices and rents). Also, we expect that farm businesses will attempt to mitigate the costs of regulatory compliance through changes in the scale, type or mix of production, or to farm practices.

<sup>&</sup>lt;sup>5</sup> We assume that farmers will pay most costs as they arise, but will take on loans to fund significant capital investment requirements. As a result, we convert capital investment into an equivalent yearly cost.

Table 1: Early estimates of the cost of key regulatory proposals to agriculture, selected years, England

	Impact on farmers in England (£m)						
EU Regulations	2012	2017	2021				
Laying Hens Directive <sup>6</sup>	4.0	4.0	4.0				
Sustainable Use of Pesticides	2.2	1.0	1.0				
Welfare At Slaughter	6.6	4.3	4.6				
BSE Testing	0.0	-0.6	-0.6				
Total (EU)	12.8	8.6	8.9				

-0.1
1.4
0.2
-40.0
0.1
-38.4

GRAND	GRAND TOTAL				13.6	-12.	8	-2	<b>29.4</b>	

NB: Figures have been rounded and may not sum exactly to the totals shown.

	Impact on farmers in England (£m)						
	2012 2017 2021						
Primarily Livestock <sup>7</sup>	8.6	0.1	-5.7				
Primarily Arable <sup>8</sup>	2.6	-12.5	-22.1				
Other <sup>9</sup>	2.3	-0.3	-1.6				
GRAND TOTAL	13.6	-12.8	-29.4				

NB: Figures have been rounded and may not sum exactly to the totals shown

<sup>&</sup>lt;sup>6</sup> These estimates cover increased cost of production only. Any capital investment required to comply with the directive is assumed to have taken place early enough that it will form part of the baseline costs of this analysis. <sup>7</sup> "Primarily Livestock" comprises dairy, grazing, pig and poultry farms

<sup>&</sup>lt;sup>8</sup>"Primarily Livestock comprises dairy, grazing, pig and pourty farms

<sup>&</sup>lt;sup>9</sup> "Other" comprises mixed farms along with any others which don't fall into the categories above.

## The benefits of regulation

2.10. New regulations are subject to detailed appraisal through the impact assessment process but direct costs are often easier to identify and relate to than benefits. The latter can vary considerably in their nature, may accrue to a different sector, or even be inferred or estimated monetary values applied to intangible benefits, e.g. public assurance in the quality of welfare standards – as a result, quantitative assessment of these tends to be less precise or may not be attempted at all. Note that benefits typically apply to society in general and often take the form of relatively small average amounts accruing to large numbers of people; it can be difficult, therefore, to compare benefits intuitively with corresponding costs since these apply to fairly small numbers of farmers but in relatively large average amounts.

2.11. A quantitative estimate of benefits is only available for TB pre-movement testing, while the abolition of the Agricultural Wages Board and changes to BSE Testing, and Pig e-reporting regulations result in cost savings to farmers; the majority of the benefits which have not been monetised relate to assuring animal welfare. This is shown in Table 2, along with a qualitative description of the different benefits.

### The aggregate impact in context

2.12. Any savings resulting from the abolition of the AWB should allow English farm businesses to compete better against their overseas counterparts. Also, several changes which act to increase costs originate from an EU requirement and so similar regulations will be implemented by our main European competitors. In these cases, the introduction of the regulations will not generally put UK farmers at a competitive disadvantage relative to other member states providing that they achieve comparable compliance levels. A summary of how the expected impacts of relevant regulations in England compare to the regulatory landscape and general underlying conditions, the effects of these regulations on competitiveness with countries *outside* the EU will vary greatly. As such, it has not been practical to investigate how the introduction of the regulations considered here might affect UK farmers' competitiveness more widely.

2.13. The impact of these changes is relatively small when compared with the historic variations in costs caused by other factors (such as fluctuations in the prices of inputs like feed, fuel and fertiliser). However, since the impacts of regulation tend to be long-lasting and consistent, if there were continuing small additions then these could potentially add up to a significant impact over time.

	2021 Cost (£m)	Benefit <sup>11</sup> (£m)	Form of benefit
Laying Hens Directive	4.0	T.B.D. <sup>12</sup>	Public assurance of welfare.
Sustainable Use of Pesticides	1.0	T.B.D.	Maintenance of existing good standards for environmental and human health protection.
Welfare At Slaughter	4.6	T.B.D.	Public assurance of welfare.
BSE Testing	N/A	0.6	Removes need for tests on healthy cattle aged over 72 months slaughtered for human consumption, which were born in the UK and 24 other Member States.
Pig e-reporting	N/A	0.1	Cost savings from move to electronic reporting.
Cattle Compensation	1.4	N/A	Transfer of existing costs from government to industry.
TB Pre-Movement Testing	0.2	0.9	Reduction in number of herd breakdowns.
Agricultural Wages Board	N/A	40.0	Reduced intervention in the agricultural labour market to put it back on a level playing field with the rest of the economy, thus improving farming's competitiveness; also, reduced regulatory burden on farmers.
Salmonella Charging	0.1	N/A	Transfer of existing costs from government to industry.

#### Table 2: Details of the annual costs and benefits from changes to regulations<sup>10</sup>

2.14. This note considers changes which have effects from 2012 onwards. Figure 1 combines these results with figures from earlier versions of this analysis to estimate the impact of regulatory changes on farmers since 2005 - the black line shows the total net change in costs. The result is indicative only, since it combines calculations using different sets of FBS data; however, it gives a good sense of the scale of the total impact of the regulations considered across the updates. The cumulative impact is £126m per year by 2021; Defra is responsible for £74m of this change which represents an increase of 15% over the estimated £495m<sup>13</sup> burden per year on farmers from the stock of Defra's regulations in 2005.

<sup>&</sup>lt;sup>10</sup> This table shows the cost transfers to farmers only but describes any benefits to society as a whole. Government will also incur costs as a result of some of these regulations.

<sup>&</sup>lt;sup>11</sup> Figures, where available, are taken from the most recent Impact Assessments as at February 2013.

 $<sup>^{12}</sup>$  To be determined.

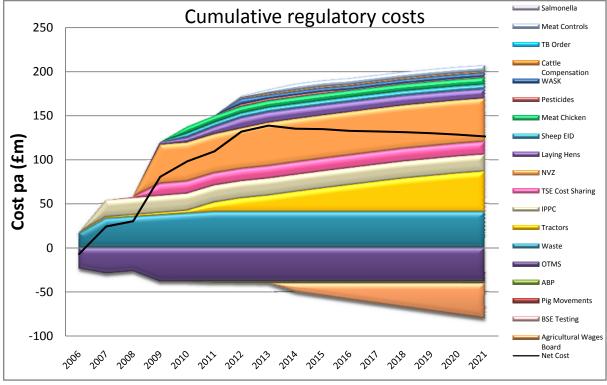
<sup>&</sup>lt;sup>13</sup> This figure of £495m is based on the estimate of Defra's regulatory stock from 2011, adjusted to strip out the contributions from regulations which have been introduced since 2005.

www.gov.uk/government/uploads/system/uploads/attachment\_data/file/69226/pb13623-costs-benefits-defra-regulatorystock110816.pdf

# Table 3: Details of how new regulations are likely to affect the UK's competitiveness relative to other EU member states

	Likely effect on compliance costs relative to other EU countries	Comments
Laying Hens Directive	Possible increase	To be implemented in all member states. However, as at January 2013 two member states remained noncompliant.
Sustainable Use of Pesticides	Possible decrease	Many member states plan to introduce more regulation on pesticides than the UK. If this transpires, it may lead to a smaller relative impact on UK farms.
Welfare At Slaughter	None	About 20 member states are planning to maintain stricter national rules of some sort so, even if the UK does decide to keep some national rules, general competitiveness is unlikely to change significantly.
BSE Testing	None	Other member states are free to make equivalent changes <sup>14</sup> .

# Figure 1: Overview of regulations which have appeared in all updates of the Cumulative Impact analysis



N.B. Includes non-Defra regulations. Where changes act to increase farmers' costs, regulations add to the positive section of the chart; where changes reduce costs, they add to the negative section. The black line shows the overall net cost. The figures used to produce the chart are relative to a 2005 starting point while those elsewhere in this analysis are relative to a 2011 baseline.

<sup>&</sup>lt;sup>14</sup> As at 14 March 2013 18 member states, including the UK, have decided to make changes to their testing regime; 7 have either decided not to change or have not announced a decision.

# 3. Assessment of impacts at sector level

## Modelling the impact of regulation

3.1. We have used the 2011 Farm Business Survey as the base of our modelling; this allows us to group farms in different ways (e.g. by size or type) and explore how the impacts vary between them. The financial impacts of expected changes in behaviour have been linked with individual farm characteristics (land area, livestock numbers, location in a Nitrate Vulnerable Zone etc.) for each of the 1,913 English farms in the 2011 survey to calculate annual compliance costs. Further information on the modelling of each proposal is given in Annex A.

3.2. As noted earlier, it is difficult to predict the impact of future policies with any certainty at this stage. Where regulations have not yet come into force, the analysis presented here is therefore only an initial assessment and serves to highlight areas where cost pressures may be significant. In particular, the final impact of the abolition of the Agricultural Wages Board (AWB) will depend on how market conditions evolve and on human behaviour and it is worth noting that the range of possible outcomes is not symmetric: one extreme is that the saving to farmers is slightly greater than the best estimate, while the other is that there is no saving at all. Another significant source of uncertainty is around the proportion of costs or savings that slaughterhouses will pass back to farmers.

3.3. Figure 2 shows how costs will vary over time for different farm types as a consequence of future regulation. It demonstrates how the initial increase in annual costs is reversed for all but poultry farms once the abolition of the Agricultural Wages Board takes place<sup>15</sup>. For most sectors, the initial cost increase is small when compared with those seen in previous versions of this analysis.

3.4. Table 4 splits out the effects of individual regulations, relating them to current income levels. It shows the abolition of the Agricultural Wages Board having a significant impact on almost all sectors; the Laying Hens Directive and the Welfare at Slaughter regulations are also important but for a much more limited selection of farm types. These last two regulations focus particularly on poultry which explains why the overall impact here is so different to other farm types. We examine the poultry sector separately first, then consider the others.

<sup>&</sup>lt;sup>15</sup> Currently, there is no definite timetable for this; for the purpose of this analysis, we assume that any effects start to be felt from 2014.

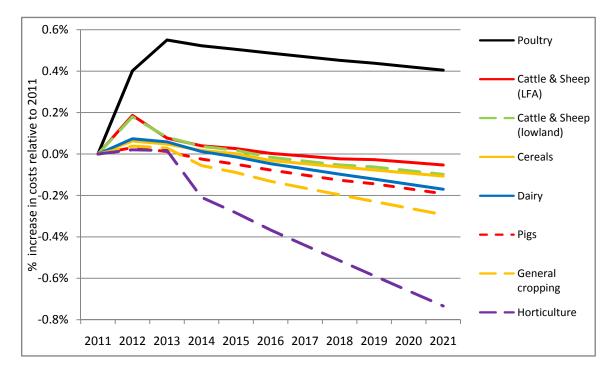


Figure 2: Increase in average farm costs over time by farm type as a result of future regulatory costs

# Table 4: Cost of each major new regulation at 2021 as a proportion of 3-year average FarmBusiness Income

					Cattle &	Cattle &			
			General		Sheep	Sheep			
	Cereals	Dairy	cropping	Horticulture		(lowland)	Pigs	Poultry	All farms
Average FBI (09/10 - 11/12)	£75,166	£69,676	£92,882	£50,870	£24,233	£25,191	£51,328	£58,552	£55,456
Laying Hens	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.1%
Pesticides	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Welfare At Slaughter	0.0%	0.1%	0.0%	0.0%	0.2%	0.2%	0.1%	3.0%	0.1%
BSE Testing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Pig Movements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%
Cattle Compensation	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tuberculosis Order	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Agricultural Wages Board	-0.4%	-1.1%	-1.1%	-5.0%	-0.4%	-0.6%	-1.8%	-1.5%	-1.0%
Salmonella Charging	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
Net effect of regulations	-0.3%	-0.8%	-1.1%	-5.0%	-0.2%	-0.3%	-1.6%	4.1%	-0.7%
Net cost of regulations	-£204	-£559	-£977	-£2,520	-£40	-£81	-£844	£2,423	-£366

### The impact of regulation on the poultry sector

3.5. In contrast to other sectors, the largest impacts on poultry farms do not come from the abolition of the AWB; the regulations which have the biggest impact impose costs on two distinct areas: the Laying Hens Directive affects egg producers while Welfare at Slaughter affects meat chicken producers.

3.6. Figure 3 illustrates how the impacts on these different parts of the sector compare. Egg and meat-producing poultry farms will experience similar absolute cost increases (from Laying Hens<sup>16</sup> and Welfare at Slaughter regulations respectively). However, egg producers feel a greater *proportional* impact since their costs are, on average, considerably smaller than those of meat producers – the difference in incomes is even greater so a chart comparing cost increases to these would show an even bigger split between egg and meat chicken producers.

3.7. The costs of the regulations will also vary considerably between farms; the production costs incurred through compliance with the Laying Hens directive are very different for free-range and conventional cage ('battery') producers since they have needed to make different changes in order to meet the new requirements.

3.8. In addition to the effect of Defra's regulation, some regulation introduced by other government departments is likely to have a significant impact on the poultry sector. The FSA regulation on Meat Controls will have a similar impact in terms of magnitude and distribution to Welfare at Slaughter while the DfT regulation on Tractor Emissions is less significant for poultry farms.

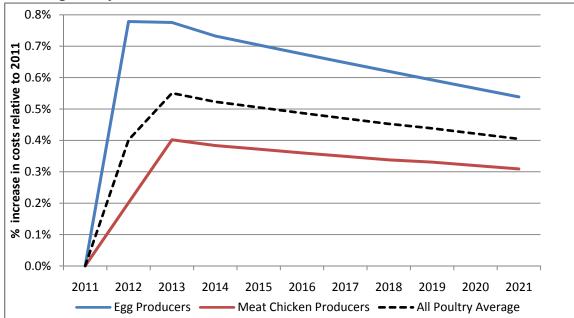


Figure 3: Increase in average farm costs over time for poultry farms as a result of future Defra regulatory costs

<sup>&</sup>lt;sup>16</sup> This refers to increased production costs only. Any capital investment required to comply with the directive is assumed to have taken place early enough that it will form part of the baseline costs of this analysis.

### The impact of regulation on other sectors

3.9. For all other farm types, the impacts are dominated by the proposed abolition of the AWB; the level of saving from this is related to the amount of paid labour used. This is apparent from Table 5 which shows how savings as a proportion of income become more significant as farms get larger and how the sectors which use the most paid labour see the largest benefits.

3.10. In addition, livestock farms will see small impacts from the Welfare at Slaughter regulations and changes to Cattle Compensation. Since the increased costs arising from changes to Cattle Compensation affect farms with Bovine Tuberculosis, these costs will not be spread evenly but will be concentrated in the South-West and West-Midlands and have a greater impact on dairy than on beef farms; the costs from the other regulations will be spread reasonably evenly across livestock farms.

3.11. Other than the AWB, pesticides regulation will produce the biggest change in costs on cereal, general cropping and horticulture farms. As a result of planned changes to the content of this regulation, the effect will be smaller than was estimated in previous versions of this analysis and so should not now be overly significant.

3.12. Other government departments' regulations have an impact on non-poultry farms as well. DfT regulations on Tractor Emissions will have a significant effect on farms and their costs are spread reasonably evenly across farm types with impacts equivalent to up to 1.5% of 3-year average FBI. The FSA regulations on Meat Controls are likely to have a similarly large impact on the pig sector, but are less significant for other livestock farms and do not affect purely arable farms.

					Cattle &	Cattle &		All farms
			General		Sheep	Sheep		(excl.
	Cereals	Dairy	cropping	Horticulture	(LFA)	(lowland)	Pigs	poultry)
Part-time	-0.2%	0.2%	0.1%	-1.0%	0.7%	0.0%	-1.2%	<b>-0.1%</b>
Small	-0.2%	-0.1%	-0.3%	-3.2%	0.0%	-0.2%	-0.5%	-0.3%
Medium	-0.3%	-0.4%	-0.6%	-1.5%	-0.1%	-0.2%	-0.3%	-0.4%
Large	-0.4%	-0.7%	-1.0%	-6.0%	-0.3%	-0.3%	-1.5%	-0.7%
Very large	-0.4%	-0.9%	-1.6%	-5.8%	-0.5%	-0.7%	-2.4%	-1.5%
All farms	-0.3%	-0.8%	-1.1%	-5.0%	-0.2%	-0.3%	-1.6%	-0.8%

Table 5: Cost of new regulations at 2021 as a proportion of 3-year average Farm BusinessIncome by farm type and size

NB: Colours indicate the relative rankings of impacts across type and size groups. Poultry farms are excluded.

# Annex A: Methodology & Overview of regulations

- A1. This annex provides a basic reference for the methodologies used to estimate costs of future regulations. In most cases these simply replicate the approach taken in the most recent Impact Assessment (IA) or Regulatory Impact Assessment (RIA), but considering only the costs which will fall to farmers. Where any important different or additional assumptions have been made these are highlighted briefly. Potential future changes in commodity prices have not been modelled.
- A2. In each case, calculations are based on data from the Farm Business Survey (FBS) in order to allow consistent comparison of costs across the set of regulations. Where the FBS data has a different coverage or requires different assumptions to the data used in the original IA then the figures in this analysis may differ from the original calculation. Although in some cases altered assumptions will result in a more accurate figure, this will not always be the case and cost estimates given here should not be assumed to supersede figures from the original IAs.
- A3. The analysis reflects the policy position at February 2013. It does not take into account any further policy development or consultation responses.
- A4. Any capital investment cost required to comply with regulations typically involves a lump sum paid up-front. It is assumed that farmers will smooth this out by annualising it over the lifetime of the equipment or building that the cost represents. An interest rate of 6% has been used throughout this analysis as an estimate of the average cost of borrowing for farmers over the 10 year period considered.
- A5. Several regulations involve costs or savings to slaughterhouses; we expect a proportion of these to be passed to farmers<sup>17</sup> but there is very little evidence available to indicate how large that proportion would be. For the purposes of this analysis we have made the following assumptions: *half* of any *cost increase* to slaughterhouses will be passed back to farmers; *quarter* of any *saving* to slaughterhouses will be passed on to farmers.
- A6. Changes in the assessments of costs since previous updates are a result of progress on policy development and impact assessments, combined with improvements in modelling and data. Regulations modelled previously which were already in force during 2011 now have their effects reflected in data for the new baseline year and hence no longer feature in the main results of this analysis.

<sup>&</sup>lt;sup>17</sup> A proportion will be passed to consumers as well, but we do not focus on that in this analysis.

### **EU Laying Hens Directive**

- A7. An RIA was prepared in 2002 assessing the effect of this regulatory change. However, given the length of time between this point and the introduction of the most significant provision in the regulation - the ban on the use of conventional cages in January 2012, Defra revisited this assessment in 2009 and produced an updated set of calculations for internal use. The figures in this analysis are based on the updated calculations.
- A8. The most significant provision in the directive – the ban on the keeping of hens in conventional cages - came into effect at the start of 2012; consequently, we have assumed that any capital investment required to meet the new standards would have been completed by the end of 2011 and doesn't contribute towards future regulation costs in this study. We do include all impacts on production costs, however, since we assume these did not take effect until 2012.

#### Sustainable Use of Pesticides

A9. The figures in this analysis are based on the estimates of costs in the IA from December 2011<sup>18</sup>.

#### Welfare At Slaughter

- The figures in this analysis are based on the estimates of costs in the IA from July A10. 2012<sup>19</sup>. Where the identified costs fall on slaughterhouses we have assumed that half of these will be passed back to farmers.
- A11. The figures reflect the proposals put forward for consultation in September 2012. Government is still considering the replies received; the response to the consultation may propose changes to the regulation.

#### Changes to BSE Testing requirements

A12. The figures in this analysis are based on the estimates of costs in the IA from November 2011<sup>20</sup>. All the savings to industry occur in slaughterhouses; we have assumed that a quarter of these will be passed on to farmers.

#### **Pig e-reporting**

The figures in this analysis are based on the estimates of costs in the IA from July A13. 2011<sup>21</sup>. Where there are savings for slaughterhouses we have assumed that a quarter of these will be passed back to farmers.

www.pesticides.gov.uk/Resources/CRD/Migrated-

Resources/Documents/I/Impact Assessment for PPP Sustainable Use Regs 2012.pdf

www.gov.uk/government/uploads/system/uploads/attachment\_data/file/82578/animal-welfare-killing-ia-120912.pdf

### **Cattle Compensation**

A14. The figures in this analysis are based on the estimates of costs in the IA from January 2012<sup>22</sup>.

### **TB Pre-Movement Testing**

A15. The figures in this analysis are based on the estimates of costs in the IA from January 2012<sup>23</sup>.

### Abolition of the Agricultural Wages Board

A16. The figures in this analysis are based on the estimates of costs in the IA from December 2012<sup>24</sup>. The costs in the IA relate to England and Wales together; we have adapted them to cover England only. There is currently no confirmed time for this; we have assumed that the changes take place from 2014 onwards.

### **Revision of Salmonella Fees**

A17. The figures in this analysis are based on the estimates of costs in the IA from December 2012<sup>25</sup>.

#### Meat Controls charges (non-Defra)

- A18. This section covers the Food Standards Agency's (FSA) plan to move to full cost recovery for the delivery of meat official controls.
- A19. The figures in this analysis are based on the IA from 2011<sup>26</sup> which sets out expected cost increases for Food Business Operators. We consider costs for England only and assume that half of these will be passed on to farmers.

# EU Emission Standards for Tractors and Non-Road Mobile Machinery (non-Defra)

- A20. This section covers two EU Directives for which the Department for Transport is responsible, but which largely impact on farming.
- A21. The analysis is based on the RIA from September 2006<sup>27</sup> and assumes that all extra costs of manufacture needed to ensure that tractors meet the required standards are passed on to farmers.

ncp-ia.pdf

<sup>&</sup>lt;sup>21</sup> www.legislation.gov.uk/ukia/2011/216/pdfs/ukia\_20110216.pdf

www.legislation.gov.uk/uksi/2012/1379/pdfs/uksifia\_20121379\_en.pdf

<sup>&</sup>lt;sup>23</sup> www.legislation.gov.uk/uksi/2012/1391/pdfs/uksifia\_20121391\_en.pdf

<sup>&</sup>lt;sup>24</sup> www.gov.uk/government/uploads/system/uploads/attachment\_data/file/82649/awb-consult-final-ia-20121219.pdf

<sup>&</sup>lt;sup>25</sup> www.gov.uk/government/uploads/system/uploads/attachment\_data/file/82544/ahvla-fee-consult-annexe-salmonella-

<sup>&</sup>lt;sup>26</sup> www.food.gov.uk/multimedia/pdfs/iameatcharging.pdf

A22. The directives are introduced through several stages over a period of time. This update of the analysis includes costs associated with Stages IIIB and IV; all previous stages are assumed to be already included in the baseline.

<sup>&</sup>lt;sup>27</sup> www.opsi.gov.uk/si/em2006/uksiem\_20062393\_en.pdf

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This document/publication is also available on our website at:

www.gov.uk/government/policies/simplifying-farming-regulations

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