Executive Summary

- In October 2010 the NFU invited six independent industry consultants to contribute to a Cost of Milk Production report. The respondents together provided data covering 809 dairy units and provided actual costs for April 2009 to March 2010 and projected costs for April 2010 to March 2011.

- The aggregated data set provides an average cost of milk production figure of 29.1 pence per litre (ppl) for the period April 2010 to March 2011.

- The average British milk price in November 2010 stood at 25.94ppl, resulting in a 3.16ppl gap between the cost of producing milk (29.10ppl) and the price the farmer receives.

- Not only are dairy farmers currently being paid less than the cost of production for their milk, a year on year comparison shows that the differential between the farm gate price and the cost of production has increased significantly over the last twelve months.

- By far the biggest contributing factors to the increase in milk production costs are increases in the price of feed and bedding, increasing by 16.6% and 13.8% respectively.

- Defra’s Farm Business Income forecasts for 2010/11 indicate that dairy farms are expected to see a 24% fall in farm business incomes. It is likely net margins will fall by around that figure also.

- The Farm Business Survey statistics show that extra borrowing in 2009-10 stood at £22,044 for the average dairy farm, this reflects an increase of 12%.

- Ironically, last year the NFU published its Great Milk Robbery Report, which suggested that dairy farmers were missing out on their fair share of millions of pounds in additional revenue to processors, equivalent to 4.3 pence per litre (ppl).

- If dairy farmers had received their fair share of available market returns this year, there would not be such a staggering gap between the price farmers are receiving for their milk and the cost of producing it.

- In addition to the immediate cost pressures on dairy farms highlighted in this report, the prolonged period of low returns that dairy farm businesses have endured is clearly unsustainable. In the long term this unattractive proposition will doubtlessly deter new entrants from a career in dairy farming.
Introduction

In October 2010 the NFU invited six independent industry consultants to contribute to a Cost of Milk Production report. The respondents together provided data covering 809 dairy units and provided actual costs for April 2009 to March 2010 and projected costs for April 2010 to March 2011.

The motivation for the report follows a sustained period of exceptional cost increases on dairy farms, which the NFU is seeking to communicate to the supply chain and others. While there are a number of private reports conducted on the cost of milk production, there is currently no independent analysis available. As such, the NFU, in collaboration with DairyCo Datum, has conducted this concise report, to highlight the following issues:

1. The average cost of milk production on dairy farms for the period April 2010 – March 2011
2. Significant contributors to input cost inflation
3. Capital expenditure and net incomes on dairy farms

Methodology

The NFU independent expert survey collected data from six sources: Kite Consulting, Promar International, Kingshay, The Dairy Group, Andersons and DairyCo. Each independent source was asked to populate a template spreadsheet with projected cost of production data for the period April 2010 to March 2011. Each consultant was also asked to provide actual cost of production data for the 2009-10 to enable a year on year cost comparison.

The resulting total weighted sample size is 800 dairy farm units1.

In addition to the weighted sample, data from Defra’s Farm Business Survey is also referenced in the report2.

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1 This means that each independent’s average cost of production has been multiplied by the number of farms in that sample and added together, then that number is divided by the total sample size. This is to ensure that smaller sample sizes do not overly skew the overall average.

2 The Farm Business Survey is conducted by Defra and surveys around 2,500 farms in England and Wales around 400 are dairy enterprises. Surveys are conducted through face to face interviews with an experienced survey professional and the survey itself is a detailed view of farm accounts of around 25 pages.
Average cost of milk production on dairy farms

The aggregated data set (Table 1) provides an average cost of milk production figure of 29.10 pence per litre (ppl) for the period April 2010 to March 2011.

The average British milk price in November 2010 stood at 25.94ppl, resulting in a 3.16ppl gap between the cost of producing milk (29.10pl) and the price the farmer receives.

Table 1: Average cost of milk production

<table>
<thead>
<tr>
<th></th>
<th>2009-10 Apr-Mar</th>
<th>2010-11 Apr-Mar</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased feed costs</td>
<td>7.21</td>
<td>8.65</td>
<td>1.43</td>
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<tr>
<td>Bedding costs</td>
<td>0.47</td>
<td>0.58</td>
<td>0.12</td>
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<tr>
<td>Fertiliser costs</td>
<td>0.83</td>
<td>0.96</td>
<td>0.13</td>
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<tr>
<td>Veterinary costs</td>
<td>1.12</td>
<td>1.20</td>
<td>0.08</td>
</tr>
<tr>
<td>Livestock costs</td>
<td>2.08</td>
<td>1.97</td>
<td>-0.11</td>
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<tr>
<td>Crop costs</td>
<td>0.51</td>
<td>0.54</td>
<td>0.02</td>
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<tr>
<td>Other variable costs</td>
<td>1.34</td>
<td>1.35</td>
<td>0.01</td>
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<tr>
<td>Fixed costs</td>
<td>13.79</td>
<td>13.85</td>
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<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee costs*</td>
<td>5.32</td>
<td>5.35</td>
<td>0.03</td>
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<tr>
<td>Machinery costs</td>
<td>4.57</td>
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<td>Land and property costs</td>
<td>2.62</td>
<td>2.60</td>
<td>-0.02</td>
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<tr>
<td>Finance costs</td>
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<td>0.51</td>
<td>0.00</td>
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<tr>
<td>Other fixed costs</td>
<td>0.78</td>
<td>0.69</td>
<td>-0.08</td>
</tr>
<tr>
<td><strong>Total costs</strong></td>
<td><strong>27.35</strong></td>
<td><strong>29.10</strong></td>
<td><strong>1.75</strong></td>
</tr>
</tbody>
</table>

*Employee costs are equal to unpaid labour and paid labour costs. Estimates for the proportion of unpaid labour varied from 40% to 60% of employee costs.

Year on Year Comparison

As shown in Figure 1 below, the overall increase in the cost of milk production between April 2009 - March 2010 and April 2010 - March 2011 is forecast to be 1.75p per litre.
With a cost of milk production in 2009-10 of 27.35ppl and an average milk price in 2009 of 24.37ppl dairy farmers were losing 2.93ppl on every litre produced. With a current differential of 3.16ppl, it is clear that the gap between the cost of milk production and the price paid for milk has widened over the last twelve months.

Therefore, in summary, not only are dairy farmers currently being paid less than the cost of production for their milk, the differential between the farm gate price and the cost of production has increased significantly over the last twelve months.

**Significant contributors to rises in costs**

By far the biggest contributing factors to the increase in milk production costs are increases in the price of feed and bedding. Feed costs in 2010-11 are forecast to be 16.6% higher than in 2009-10 (equivalent to a rise of 1.43ppl). Bedding costs have risen by 19.8% equivalent to 0.12ppl (figures 2 and 3). Fertiliser prices have also increased and contributed to a rise in costs, up by 13.9% (0.13ppl) in the last year, to £300/t brought about by a rise in oil and energy costs.

According to DairyCo blended fertilisers have seen a rise of approximately 50% since last year (November 2009 – November 2010). Similarly, the price of Ammonium Nitrate fertiliser bags (34.5%) has increased by 57% year on year (figure 4).
Higher feed prices are being driven by global demand and supply issues, which have affected most dairy feed ingredients, especially wheat. In particular the Russian grain export ban and droughts in Europe, Canada and some parts of the USA have caused concerns over feed availability. As a result, UK feed wheat exports have increased, which is compounding concerns over lower feed availability here (DairyCo Datum).

Consequently feed wheat prices have been rising throughout the year. In December feed wheat prices were approximately 66% higher than in December 2009, at an average price of £185/t. Some futures markets are already trading feed wheat for July delivery at record highs of £200/tonne. As such there is no expectation that feed prices will fall back in the short term.
Capital expenditure and farm income

The income generated from a dairy enterprise is either invested or withdrawn. Capital expenditure on dairy farms is driven by future milk price and profit expectations and the availability of cash.

Defra’s 2009-10 farm business income figures show a 19% fall in dairy farm operating income year on year (from £69,000 to £56,100). Defra’s Farm Business Income forecasts for 2010/11 indicate that dairy farms are expected to see a 24% fall in farm business incomes. It is likely net margins will fall by around that figure also.

Figure 9 below shows the relationship between capital expenditure and net margins, which based on previous years would almost certainly indicate a substantial fall in on farm investment in 2010-11 due to a fall in margin.

Figure 9

However, it is interesting to note that despite incomes falling in 2009-10 the statistics show that net capital investment increased from £26,824 to £32,227 per farm. However much of the increase was financed through increased borrowing.

The Farm Business Survey statistics show that extra borrowing in 2009-10 stood at £22,044 for the average dairy farm, this reflects an increase of 12%.

Conclusions

Last year the NFU published its Great Milk Robbery Report, which suggested that dairy farmers were missing out on their fair share of millions of pounds in additional revenue to processors, equivalent to 4.3 pence per litre (ppl).

This was based on the fact that actual revenue to processors in May 2010 was £19m higher than in May 2009 and that for as long as dairy markets remained strong then the increase in revenue of £19m
seen in May 2010 would return an extra 4.3ppl to processors on every litre sold. This equates to £57 million every quarter, or an extra £223m over the next 12 months.

Ironically therefore, with a deficit currently of 3.16ppl between average milk prices and production costs, if dairy farmers had received their fair share of the 4.3ppl in available market returns this year, there would not be such a staggering gap between the price farmers are receiving for their milk and the cost of producing it.

In addition to the immediate cost pressures on dairy farms it is important to also recognise that the prolonged period of low returns that dairy farm businesses have endured is clearly unsustainable. Not only are a lack of return on capital, falling incomes, poor margins and insufficient private drawings considered unviable for any business, it does not enable reinvestment in the business. In the long term this unattractive proposition will doubtlessly deter new entrants from a career in dairy farming.