

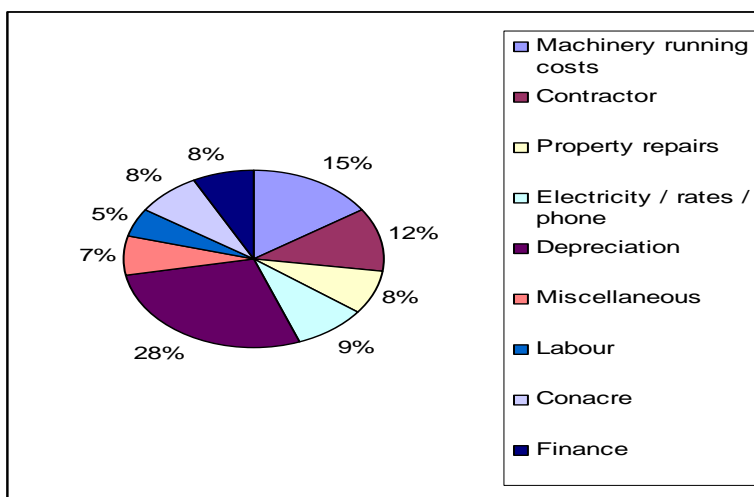
## Keeping Costs Under Control

The last 12 months has seen milk price declining from a level which created real optimism for the future to one where some even question if there is a future in the industry. Market analysts had predicted that with the EU removing export refunds and intervention, dairy farmers would experience significant changes in price over a short time. Few, however, predicted the scale of the current down-turn.

As the industry adjusts to lower milk prices the focus once again has been placed on cost control. Costs on dairy farms have been split into two categories, variable and overhead costs. Variable costs are costs which vary with output and include concentrates, veterinary, AI, fertiliser and grassland costs. Overhead costs are sometimes referred to as fixed costs because it was argued that they do not vary with output. While this is true to some extent, many do vary with cow numbers so it is preferable to use the term overhead costs. Overhead costs include labour, depreciation, machinery running costs, property repairs, electric, interest, conacre and insurance.

Overhead costs are approximately 45% of total costs of production. While these costs are often difficult to address in the short term, overall business efficiency cannot be improved without tackling them.

The diagram below shows the split in overhead costs for dairy farms which use the Greenmount Dairy Benchmarking programme:



## Capital Expenditure

Depreciation arises from purchasing new machinery and constructing new buildings. It spreads the cost of the investment over its lifetime. Over a three year period depreciation costs are up by one third which far exceeds the increase in cost in any other category. Almost 70% of depreciation is attributed to machinery and the remainder to buildings. There has been a small increase in the relative proportion of building depreciation possibly due to the construction of extra slurry storage to meet the requirements of the Nitrates Directive. While little can be done about depreciation relating to historical expenditure, the future costs of depreciation can be controlled with careful decision making.

## Review Machinery Purchase

On many dairy farms there is an extensive fleet of machinery. Some of this machinery expenditure has occurred in an effort to minimise contracting bills. However due to the demands of expanding herds, there is often insufficient labour to use the machinery. The simple slurry spreading example below illustrates there could be saving of 50% through using a contractor. This approach can be applied to other operations to remove the capital cost of the machinery, its upkeep and associated labour.

<b>Slurry Spreading</b>		Source: DARD Farm Business Data 2009
	£/Hour	Notes
Using a contractor (2000 gallon tanker)	<b>20.00 – 25.00</b>	
Cost of running 120hp tractor	19.06	includes repairs, depreciation, insurance and fuel. assumes £900 depreciation and 100 hours use per year.
Slurry tanker depreciation	9.00	
Wages	<u>5.92</u>	
<b>TOTAL</b>	<b>33.98</b>	

## Review Investment

Many dairy farmers used the opportunity of building new tanks to invest in improving farmyard layout and associated facilities. For those who are about to embark on further expenditure it is worthwhile to ask yourself 'Can I justify this investment at current milk price?' There are probably three broad justifications:

- *To improve the efficiency of the existing herd; -*

Investments which are linked to improvements in efficiency are easy to justify. For example, if there is insufficient feed space or the milking facilities are requiring too much labour, these investments can quickly yield a return.

- *To help accommodate a planned expansion in the herd;-*

Even if young stock are available to join the herd, it is best to question if expansion is financially worthwhile.

- *To provide accommodation to expand the herd in the future;-*

It is unlikely that this investment will yield sufficient returns at current lower milk prices. It would be prudent to do a detailed budget before proceeding. Costs of the building work will add to production costs. There will be additional working capital costs associated with stock purchase and possible extra labour and conacre costs. Only the most efficient farmers could justify this investment.

## Benchmark Performance

As margins come under increased pressure every cost needs to be scrutinised. Benchmarking is a useful tool which will help you compare your costs with costs on other farms. It will highlight areas where there is scope for improvement. *Contact the local CAFRE Dairy Development Adviser or Michael Verner on 028 9442 6895 if you would like to have your business benchmarked.* The information will be treated in the strictest confidence. A report and advice will be provided on how to improve performance.

## Monitoring Energy Use on the Farm

Increased energy costs are having major impact on dairy profitability. Apart from the obvious electricity costs the increased energy costs have affected fertiliser, feed and stretch beyond the farmgate to processing and transport. Energy costs deserve careful scrutiny at present. To address this, CAFRE has been carrying out pilot audits on 100 farms throughout NI. Initial findings indicate that on some farms it takes twice as much energy to produce a litre of milk than on others.

The main demands are milk cooling, water heating, vacuum pump and lighting. Other usage comes from equipment such as scrapers, pumps and slurry separators. The figures below, taken from the audit results, give the total energy usage per cow per year and the associated cost. The figures indicate the range of energy costs are from as high as £66.38 per cow to as low as £22.75 per cow per year.

Use per cow	Energy Usage (kWh)	Cost (£)
Lowest	182	22.75
Average	332	41.50
Highest	531	66.38

The audit results show that 14% of the farms were on NIE Popular Tariff (24 hour standard cost) and therefore did not benefit from the cheaper electricity during the night. Of the remaining farms the benefits obtained from the cheaper rate on the NIE Farm Night Saver tariff varied considerably. Currently the cost per kWh (unit) is 6.86 pence at night and 15.65 pence during the day. The higher the percentage of energy used at night will reduce overall energy costs. Each farmer was able to use the information to compare his electricity usage with the other farms in the audit.

### ***Actions to reduce electricity usage:***

- Changing to NIE Night Saver: contact NIE for a free option check on 08457 455 455 or [www.nieenergy.co.uk](http://www.nieenergy.co.uk)
- Ensure time clocks are set correctly particularly at the beginning and end of British Summer Time.
- Heat all water on the Night Saver.
- Consider a plate cooler: an efficient plate cooler of sufficient size may reduce milk cooling costs by 60%.
- Provide as much natural light as possible in the dairy buildings.
- Lighting: use low energy fluorescents in the parlour, use low energy bulbs in the dairy buildings and use sodium bulbs rather than tungsten halogen or metal halide for the yard/security lighting.
- Turn off all lights when not needed.
- Insulate all hot water pipes and tanks.
- Keep condenser coils clean to ensure heat can dissipate easily.
- Fix hot water leaks.
- Pay an electrician to identify areas where energy could be saved.

*The CAFRE farm audit will continue in the coming year and to take part contact the local Dairying Development Adviser or David Trimble at Greenmount Campus 028 9442 6682.*

## The Importance of Reseeding and Lime

Due to the exceptional wet weather this spring many grass swards have suffered damage due to poaching. Good management practices will help the recovery of grass production from the least affected swards. Fields which have suffered severe damage will require reseeded to fully restore their grassland productivity. Liming is one important aspect of this operation.

### Grass Seed Mixture

Choose a grass mix carefully, deciding whether the sward is for cutting or grazing and match to soil type. Only varieties included in DARD's Recommended Varieties for Northern Ireland 2009/2010 should be used. Copies of this booklet can be obtained from local DARD offices. It contains the main performance characteristics including heading date, grazing yield, silage yield, D-value and sward density.

With higher fertiliser costs there is an increased interest in using clover. Clover improves the nutritional value of the sward and contributes to soil fertility. A grass clover sward containing 30 to 40% white clover in the dry matter can yield as much as a grass sward receiving 200 kg nitrogen per hectare with a substantial cost saving.

### Fertiliser and Lime Requirement

Soil analysis should be carried out to determine the nutrient and lime status of the field. This will cost £9.50 per sample and can represent up to 4 hectares (10 acres) of grassland. Soil augers and sample bags are available from local DARD offices. With this information suitable fertilisers can be selected. Remember that with the Nitrates Directive no fertiliser nitrogen can be sown after 15 September so plan to finish reseeded before this date.

Lime status is critical as perennial ryegrass varieties and clover establish poorly in acid soil conditions. The recommended pH is 6.0 – 6.5. A lower pH of 5.6 is recommended for peaty soils. Liming soils stimulates the release of nitrogen from soil organic matter and increases availability of phosphorus for grass. There are a number of liming materials on the market – Ground limestone, Magnesium Ground limestone and Granulated Lime. The effectiveness of the materials is influenced by their Neutralising Value (NV). The higher the NV the more effective the material will be in raising soil pH.

Regardless of the soil requirement it is best not to apply any more than 7.5 tonnes of ground limestone per hectare (3t/acre) at any one time. In a low pH situation the lime should be split over two applications during a five-year period.

### Aftercare of the Reseed

Reseeded is an expensive operation so every effort should be made to prolong the increased productivity of the new sward. Take care not to under or over graze in the first few years and avoid any poaching which will be more severe on reseeded ground than on an older sward. When spraying weeds such as docks use a clover safe chemical if relevant. Careful management of the new sward will pay dividends for the dairy herd.

**CAFRE farm walks are being held throughout NI to address reseeded and other grassland issues. Contact the local CAFRE Dairy Development Adviser for details.**

*Dairy Bulletin June 2009 was prepared by Olwen Gormley with contributions from the Western Dairying Team, Nigel Murphy and David Trimble, CAFRE Greenmount Campus, Antrim. Contact 028 9442 6756 or [www.ruralni.gov.uk](http://www.ruralni.gov.uk)*