



The Region's
Development Agency

The Rural Enterprise Investment Programme:

Grant Investment for Dairy Farm Infrastructure: Animal Health & Welfare Guidance Part A

Funding under the Rural Development Programme for England (RDPE)



The European Agricultural Fund for Rural Development:
Europe Investing in Rural Areas



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1. OVERVIEW

- 1.1 This package of grant support has been developed to assist farm businesses with the additional infrastructure costs associated with delivering exceptional Animal Health and Welfare (AHW) standards. It recognises that investment that improves AHW tends to have other positive effects on farm viability:
- Reduced disease costs and improved animal performance;
 - Resource efficiency through more effective use of labour and inputs;
 - Environmental sustainability through increased efficiency of production;
 - Staff motivation, retention and succession.
- 1.2 This guidance sets out funding parameters for the following investments:
- Technologies and Equipment
 - Dairy Cow Cubicle Housing (Milking Herd)
 - Dedicated Transition Housing (Dry, Calving and Newly Calved Cows)
 - Dedicated Young Calf Housing (Dairy Followers under 6 months old)
- 1.3 The funding is available through the Rural Enterprise Investment Programme (REIP) and is focused on large scale projects that will provide an exemplar of best practice in dairy AHW that can be shown to:
- address Animal Health and Welfare (AHW) to the wider holding;
 - be part of a long term strategy for the farm;
 - be dependent on grant funding to implement best practice;

2. GENERAL FUNDING PRINCIPLES

- 2.1 Over the past decade farms, in response to declining profitability, have strived for greater efficiencies with the result of larger cows and herds that require a higher standard of management. However, on many farms the rate of improvement in farm infrastructure has not kept pace with the changing needs of the modern dairy cow.
- 2.2 The recently published Farm Animal Welfare Council (FAWC 2009) opinion on dairy cow welfare highlights lameness, mastitis and infertility as the three areas of greatest welfare concern. This funding principally targets investment in infrastructure that tackles these concerns.
- 2.3 Projects will need to demonstrate that the proposed investment will:
- Meet the minimum investment requirements;
 - provide Animal Health and Welfare (AHW) benefits that exceed standard agricultural production and legal requirements;
 - meet the minimum design criteria set out by Yorkshire Forward;
 - tie in to the wider AHW approach of the holding;

- increase the economic viability of the holding;
- demonstrate AHW justification for each element of the project by way of an AHW farm assessment and veterinary support.

2.4 Projects awarded funding will, for the first 3 years, be required to complete veterinary reports to identify changes in AHW indicators such as mastitis.

2.5 The maximum funding period for projects is two years.

3. GRANT RATES

3.1 The applicable grant rate for your proposal(s) will be influenced by the type of investment and whether the investment is to be located within a Less Favoured Area (LFA) or Severely Disadvantaged Area (SDA):

INVESTMENT	MAXIMUM GRANT RATE - % OF ELIGIBLE COSTS	
	Non LFA/SDA Location	LFA/ SDA Location
Technologies & Equipment		
Technologies and Equipment	Up to 50%	Up to 60%
Dairy Cow Housing, Dedicated Transitional Housing and Dedicated Young Calf Housing (including internal fittings)		
Improvements to existing housing	Up to 50%	Up to 60%
Construction of new / replacement housing	Up to 20%*	Up to 24%*
<i>*These lower grant rates are to reflect grant being eligible on the additional building space required to meet REIP design criteria.</i>		

3.2 To be eligible projects must have a minimum grant requirement of £25,000 for example:

- Projects *purely* relating to the installation of technologies and equipment or improvements to *existing* housing will require eligible costs of at least £50,000 for a non LFA farm (50% of £50k = £25k grant); or
- Projects *purely* relating to the construction of *new* housing on a non LFA farm would require minimum eligible costs of £125,000 (20% of £125k = £25k grant).

3.3 Projects will need to show a strong rationale for funding.

4. WHAT SHOULD I DO NEXT

4.1 Read Guidance & Complete an Expression of Interest (EOI) form

This form requests basic information on the farm business and investment proposal in order for Yorkshire Forward to provide initial advice as to:

- The eligibility of your proposal;
- How much you could apply for; and
- Specific areas of information a full application would need to address.

4.2 Your EOI should identify:

- Who the applicant business is;
- Farm background - area farmed, cow numbers, current systems;
- Proposed investments and basic reasons for these, e.g. to reduce mastitis;
- Estimated costs associated with each of the investments; and
- The type of private finance arrangements you are considering.

4.3 The EOI form can be downloaded at www.yorkshire-forward.com/rural

4.4 Prepare and submit full application to the REIP

Should your EOI identify a project that is eligible to apply Yorkshire Forward will provide you with the application documentation and guidance in order for you to prepare and submit a full application. A Yorkshire Forward facilitator will also be assigned to work with you as you develop your application and advise on the information you need to submit.

4.5 In order to submit a full application to the REIP all the relevant planning consents for the project will need to be in place.

4.6 Await Funding Decision from Yorkshire Forward

On registration of a complete application Yorkshire Forward will aim to provide a funding decision within 6 to 8 weeks depending on the size of your proposal.

4.7 Should a funding contract be offered this will set out:

- The costs on which you are eligible to claim funding;
- How much grant you are able to claim and when you must claim this;
- What you must deliver in return for grant investment;
- Standard terms and conditions of grant investment.

4.8 If your application is approved it can be selected for monitoring for up to 5 years after the last payment of the grant to ensure the conditions of the offer have been maintained and the investment is still in situ and being used for the purposes of the award. Grant can be re-claimed if a breach of the contract is found within this period.

5. CONTACT DETAILS

5.1 Further guidance can be sought from the Yorkshire Forward Rural Business Facilitators:

West Yorkshire, Craven and Harrogate:

Louise.Hardcastle@Yorkshire-Forward.com Tel: 07792 274769
Nick.White@Yorkshire-Forward.com Tel: 0113 394 9986

Richmondshire, Hambleton, Ryedale, Selby, Scarborough and York:

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6. ELIGIBLE INVESTMENTS

6.1 Where general funding principles are met investments in the following infrastructure will be considered for funding:

6a) Technologies & Equipment

6.2 Funding of individual small scale investments under this category will not be suitable – projects must look at the whole farm AHW approach.

6.3 **Parlour Design Features** including:

- Cluster backflush
- Automatic post milking teat dipping
- Low yield detectors and automated segregation gating systems;
- Automated oestrus detection systems

Reason:	Prevention of and improved treatment of mastitis, infertility and illness
Aims:	<ul style="list-style-type: none"> • Improved AHW; • Reduced vet and medicine bills; • Increased yield per cow; • Increased Farm Profitability.

6.4 Parlours

- Robotic – costs associated with the robot only;
- Rapid Exit – costs associated with the rapid exit system only;
- Rotary - costs associated with the rotary platform system only.

6.5 The following are not eligible for support:

- Expansions and replacements of the above systems;
- Parlour housing;
- Standard milking equipment (units, jars pumps etc);
- Dairy housing and equipment (bulk tanks etc).

Reason:	Increasing milking speed and efficiency has the potential to improve cow health and welfare by: <ul style="list-style-type: none"> • Reducing standing times • Increasing resting and feeding times • Allowing more labour time in the day for other husbandry tasks
Aims:	<ul style="list-style-type: none"> • Improved AHW; • Reduced vet and medicine bills; • Increased yield per cow; • Increased Farm Profitability.

6.6 Enhanced Handling Facilities

- Automated foot baths
- Dedicated handling facilities connected with a parlour shedding system

Reason:	Improved treatment and prevention of lameness and mastitis
Aims:	<ul style="list-style-type: none"> • Improved AHW; • Reduced vet and medicine bills; • Increased yield per cow; • Increased Farm Profitability.

6.7 Automated Heat Detection Systems

Automated technologies for the detection of the occurrence of physiologic or behavioural changes that correlate highly with ovulation.

Reason:	To improve fertility rates through increased oestrus detection.
Aims:	<ul style="list-style-type: none"> • Improved AHW; • Reduced expenditure on untimely/ unsuccessful inseminations; • Reduced reproduction culling and excessive replacements; • Increased Farm Profitability.

6.8 Optimal Ventilation Systems and Heat Stress Reduction

- Curtain sides that allow the amount of inlet ventilation to be varied depending on the prevailing weather conditions
- Fans
- Misting systems in collecting yards or feeding areas in combination with forced ventilation
- Roof insulation that decreases radiant heat effect in cattle sheds

6.9 Ventilation costs associated with the building structure by way of roof and ridge design are considered under the Dairy Housing sections below.

Reason:	Reduce heat stress and disease.
Aims:	<ul style="list-style-type: none"> • Improved AHW; • Reduced vet and medicine bills; • Increased yield per cow; • Increased Farm Profitability.

6.10 **Enhanced floor surfaces** such as strategic rubber flooring in parlours.

Reason:	Reduce lameness and increase feeding time.
Aims:	<ul style="list-style-type: none"> • Improved AHW; • Reduced vet and medicine bills; • Increased yield per cow; • Increased Farm Profitability.

6.11 Designated Cow Tracks

Costs associated with the installation of new dedicated cow tracks will be considered for funding. A copy of specialist advice on the track design including surface material and drainage should be submitted with the REIP application.

6.12 The track(s) must be above the height of the surrounding land and free draining.

6.13 Planning consent / written confirmation from the Local Planning Authority that consent is not required will be required with a full REIP application.

6.14 Costs associated with the repair of existing tracks are **not eligible** for grant.

Reason:	Over uneven terrain, cows will place their front feet to avoid stones or damaging surfaces, and normally place hind feet in the position vacated by the front feet. Lameness reduces a cow's ability to do this and mud and water prevent cows seeing and avoiding stones.
Result:	<ul style="list-style-type: none"> - Reduced lameness & mastitis; - Improved cow flow (and reduced herding time) - Reduced field poaching and environmental impact - Improved Grazing Systems - Increased Farm Profitability

6.15 Calf Feeding Systems

- Automatic calf feeding systems that monitor individual milk intake and highlight calves with reduced intake for attention;
- Small scale pasteurising units;

6.16 These costs will only be considered for funding where there is appropriate calf housing as set on in section 6D of this guidance.

Reason:	To ensure a consistent feeding routine and aid good calf digestion.
Aims:	<ul style="list-style-type: none"> • Improved AHW; • Reduce cases of diarrhoea and other diseases; • Reduce veterinary and medicine bills; • Increased Farm Profitability.

6.17 Resource Efficiency

Technologies such as those available under the Farm Resource Efficiency Programme (FREP) will be considered as part of an AHW project where the **grant required on the AHW elements of the project is at least £25,000**. Further information on the types of technologies eligible are contained within the FREP guidance at www.yorkshire-forward.com/rural

Reason:	Reduce farm production costs and environmental sustainability
Result:	Improved farm profitability

6b) Dairy Cow Cubicle Housing (Milking Herd)

6.18 The following design features must be met as a minimum:

- **Cubicle sizes** must be at levels indicated within the table at Appendix 1 to this guidance - these being dependent on cow size;
- **Escape routes and cross paths** provided at each end of the cubicles and every 20 cubicles. Paths to be at least 2.4m wide (assuming no water troughs in the space);
- Cubicle **passage ways** to be at least 3m wide;
- **Feeding space** at trough per cow of at least 0.7m and feed stance depth of at least 5m providing an area per cow of at least 3.5m².
- **Ventilation** - 0.1m² of outlet through roof apex, 0.4m² of inlet per cow. New buildings should provide a minimum roof pitch 12.5°

6.19 All applications for cubicles will need to provide a herd assessment showing how they have arrived at their design of cubicles, including the herds average cow size, how lunging has been accounted for etc.

6.20 Costs associated with slurry and manure storage and automatic scraper systems are **not eligible** for funding.

Reason:	<ul style="list-style-type: none"> • Increase resting and feeding time. • Reduced aggressive interactions (bullying) • Allow cows to demonstrate normal behavioural patterns
Aims:	<ul style="list-style-type: none"> • Reduced lameness and mastitis; • Reduced vet and medicine bills; • Increased yield per cow; • Increased Farm Profitability.

6c) Dedicated Transition Housing - Dry, Calving and Newly Calved Cows

6.21 Applications need to provide a declaration by the farmer and his veterinary surgeon confirming that the project is explicitly to produce a dedicated transition management facility for AHW and productivity improvement.

6.22 The following design features must be met as a minimum:

- Straw yards must provide a bedded area of at least 10m² per cow;
- A scrapeable feed/water area with curb separated bedded area;
- Cubicle systems must meet dimensions detailed at Appendix 1;
- Attached but separate calving facilities for 2 cows plus one for every 100 cows over 200. These must provide at least 10m² per cow;
- The housing must be divisible to allow separation of transition / calving and fresh cows;
- Provision for over 0.7m feed space per cow or a locking yolk per cow;
- Ventilation 0.1m² of outlet through roof apex and 0.4m² of inlet per cow;
- Minimum roof pitch 12.5°

Reason:	<p>The functioning of the dairy cows immune system during the 'transition period' is suppressed and good management of the cow during this period is critical.</p> <p>In a review of the major advances in disease prevention in dairy cattle (LeBlanc et al 2006) it is estimated that 75% of disease in dairy cows occurs in the first month after calving.</p>
Aims:	<ul style="list-style-type: none"> • Improved AHW; • Reduced vet and medicine bills; • Increased yield per cow; • Increased Farm Profitability.

**6d) Dedicated Young Calf Housing
(Dairy Progeny /Bought in Followers up to 6 months old)**

6.23 Applicants must have taken independent specialist or veterinary advice on the design of the proposed building. A copy of this written advice should be submitted with the REIP application and it should support the proposed design of the building in the areas of ventilation, pen system and drainage.

6.24 Applications need to provide a declaration by the farmer and their veterinary surgeon confirming that the project is explicitly to provide a dedicated facility for dairy herd progeny/bought in dairy followers up to 6 months old.

6.25 The following building design features must be met:

- Provision for individual **quarantine accommodation** constructed and sited so that the calf can see and hear other calves.
- **Space per calf** of at least:

	Min bedded area	Loafing area*	Total
Under 100kg	1.5 sq m	1.8	3.3
Under 200kg	2.5 sq m	2.5	5
*Hard standings for weaned calves providing the feed and water areas			

- **Ventilation**

Minimum Cubic capacity per animal:	
Up to 60 kg	6 cu m
Up to 90 kg	10 cu m
Up to 150 kg	13 cu m
Up to 200kg	15 cu m

Air inlets should be above calf height, baffled by space boarding or other windbreak material and be about 0.05m² per calf

Air outlets should be about 0.04m² per calf and be at least 1.5m above the ventilation inlet;

Open ridge (pitched buildings).

- **Drainage** – floor falls in pens should be at least 1 in 20 and 1 in 10 below milk feeding areas.

Reason:	It is estimated that up to 6% of calves born die before they reach six months of age, at a cost to the industry of about £60m per annum. Scouring is the greatest single cause of death and Pneumonia is the most common disease of weaned calves. Defra 2003
Aims:	<ul style="list-style-type: none"> • Reduced disease and mortality levels; • Reduced vet and medicine bills; • Improved AHW and Farm Profitability.

7. Exclusions

7.2 Ineligible costs *include*:

- Items ordered/purchased and work commenced prior to a “grant confirmation letter” been received from Yorkshire Forward;
- The farms own labour;
- Purchase of agricultural production rights, animals, plants and planting;
- Expansions and replacements of parlour systems;
- Parlour and Dairy housing;
- Standard milking and dairy equipment (units, jars, pumps, bulk tanks etc);
- Slurry and manure storage including automatic scraper systems and slats;
- Simple maintenance or replacements;
- Housing for calves and followers over 6 months;
- Investments to comply with current legal/regulatory standards;
- VAT, except non-recoverable VAT when borne by the beneficiaries other than non taxable persons;
- Interest on debt and running costs;
- Costs connected with leasing or hiring, such are lessor’s margin, interest refinancing costs, overheads and insurance charges.
- In kind contributions can only be used in relation to collaborative activity.

APPENDIX ONE – Required Cubicle dimensions

Body Weight	Animal Weight								
	Kgs	181	272	363	454	544	635	726	816
Cubicle Width	Inches	29	33	36	40	44	47	51	54
	Cm’s	74	83	92	101	110	120	129	138
Body Resting Length	Inches	43	48	52	57	61	66	70	75
	Cm’s	110	121	132	144	155	167	178	189
Total Cubicle Length	Inches	57	65	73	82	90	98	106	114
	Cm’s	145	166	186	207	228	248	269	289
Head Rail Height	Inches	32	35	37	40	43	45	48	51
	Cm’s	81	88	95	102	109	115	122	129

Nordlund, K., S. Peek, T. Bennett, K. Emery, and J. Gaska. 2001. *Inches from Disaster: Mastitis and Injury Problems Associated with Freestall Modifications in a Large Dairy Herd. Pages 296-300 in proc. 2nd Int. Symp. Mastitis and Milk Quality, Vancouver, Canada. Natl. Mastitis Council, Madison, WI.*

The figures are taken to represent centre to centre of cubicle partitions.



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