

Farm diversification new business ideas – Specialist Crops and Livestock

Dairy Goats

Key points to Consider

- Goats' milk is perceived by some as a healthy product.
- Northern Ireland has ten licensed dairy goats milk producers. Goat products are currently imported from countries such as France, Greece and Italy.
- The market requires a uniform product in terms of quality and taste.
- Goats are seasonal breeders, the subsequent shortage of milk in winter presents a problem for processors.
- Milking must be carried out hygienically using equipment suitable for food use.
- Producers require a licence to offer milk or milk products for sale to the public.
- Potential exists for developing added value goats milk products.



Market Overview

Goats' milk is perceived by some as a healthy product and provides an alternative for those who are allergic to cows' milk. It is known to alleviate symptoms of asthma or eczema. The main products from a dairy goat enterprise are fresh pasteurised milk; frozen milk; cheese, yoghurt and ice cream. It is essential that goats milk and goats milk products are uniform in terms of quality and taste.

Goat products are currently imported from countries such as France, Greece and Italy. Presently Northern Ireland has ten licensed dairy goat producers, supplying liquid milk direct to local retail outlets and processors in Co Tyrone and Co Donegal.

Goat Products Enterprises Ltd provide technical and marketing information for Northern Ireland goat milk producers.

Milk Production Requirements

Establishing a Herd

The most common breeds of dairy goats in Northern Ireland are British Saanen, Anglo Nubian, British Alpine and British Toggenburg. Availability of quality stock from high yielding "milk recorded" lines can be limited. The health status of stock should be established before purchasing. Breeding from within the herd can be used to increase the herd size given that two or more kids per female can be produced per year. These kids will be sexually mature at six to seven months. Selection of female stock should be based on desirable traits for breeding and milk production.

Milk Supply

Generally the breeding season runs from September to February, and is triggered by decreasing day length. Oestrous then occurs every 10 to 21 days and lasts 12 to 48 hours. The gestation period is approximately 150 days. Seasonal breeding results in seasonal milk production and therefore a shortage of milk in winter. This presents a problem for the processor who requires milk all year. A solution to this problem is to vary the breeding cycle by administering hormones and by altering environmental conditions, for example, daylength. Annual milk yield varies from 300 litres to 1,000 litres per doe.

The compositional quality of milk varies greatly between different breeds, herds and individuals within the same herd. Management and feeding can have a large effect on production. A controlled feeding regime may be needed to achieve uniform quality and taste.

Buildings

The ideal environment for a housed goat is an open airy building that provides shelter from rain and the prevailing wind. Most Northern Ireland goats are intensively farmed and housed all year round. Goats can be kept on straw bedding, expanded metal or slats. Housing generally consists of bedded loose houses or individual pens. Goats should have access to concrete to maintain feet condition.

Siting and layout of a new goat unit will require careful planning. Modification of unused farm buildings can reduce costs.

Feeding Systems

In some cases goats are out at grass in the summer and housed in the winter. The stocking rate is approximately ten goats per hectare. Adequate fencing is required to prevent animals wandering and to keep them away from hedges where they could eat plants or herbs, which would taint the milk. Goats in full milk, producing 4-5 litres per day should be fed 1.5-2kg of concentrates per day. This is usually fed during milking. In winter goats are fed silage or hay. Fed ad libitum, they can consume 5-7kg of silage per day.

Health

Goats are susceptible to some of the same diseases as sheep, such as clostridial diseases, footrot, worms, liver fluke and external parasites. In larger, more intensive units disease can be a problem.

Milking facilities

Milking facilities vary depending on the size of herd. Small herds can be milked by hand using a stainless steel bucket and strainer. Medium sized herds, up to 50 goats, use a bucket unit, which can operate with one or two clusters at a time. In larger herds, milking is carried out in purpose built milking parlours.

The design of a milking parlour for goats can range from a single, double abreast to a sophisticated rotary with electronic milk meters. The cost of a single abreast parlour with feed managers to hold 12 or more goats, including installation, would cost around £12,000 – excluding alteration to buildings. This would be appropriate for milking 50-100 does.

An adequate milk storage tank and cooling system should be located in the dairy. To facilitate rapid entry into the parlour a covered collecting yard should ideally be circular in shape, adjacent to the parlour and large enough to hold the whole milking group.

Hygiene

Milking must be carried out hygienically using equipment suitable for food use. Milk must be cooled to the required storage temperature and equipment thoroughly cleaned and disinfected after use. Persons carrying out milking must observe absolute cleanliness and wear suitable protective clothing.

Requirements for processing and adding value

Premises and equipment for processing the milk require significant investment and must comply with legislation requirements. The site for milk processing premises must be carefully selected and the factory design will require provision of hygienic conditions and the separation of raw milk from the final product lines. The range of equipment needed for processing should meet the appropriate food standards legislation and should be selected to suit the product to be manufactured. Two integral parts of AFDS, Loughry College and Quality Assurance together with your local Environmental Health Officer can assist with clarification of all these requirements.

Choosing to develop and distribute added value products will require commitment and substantial investment. Success with processing product lines will be dependent on finding workable distribution solutions and an ability to market the product. Loughry College, offer a range of training courses including product development and product manufacturing.

Financial Considerations

Seasonal supply causes price fluctuation. The anticipated productive life of a doe is five to six years, generally producing two kids per annum. Gross margin returns for liquid milk production will vary from £40 to £120 per doe per annum, depending on achieved milk yields and the management system employed.

Profitability will depend on:

- Achieving high milk yields (600 litres plus and preferably 900 litres)
- Finding a market for the milk or product line
- Achieving consistent milk quality and taste
- Availability of low interest investment capital for high intensive system and sufficient clean grass rotations for an extensive system

Note: the information provided herein is for general information only. It is not necessarily complete and is not intended to address the specific circumstances of any proposed enterprise. The market and circumstances may change substantially. Further research will be required before embarking on any new enterprise.

Legal requirements

Milk licence

Producers require a licence to offer milk or milk products for sale to the public. The local AFDS, Quality Assurance Officer can advise on requirements to meet licensing requirements. In addition, the producer must comply with provisions in the Welfare of Livestock Regulations (NI) 1995, the Dairy Products (Hygiene) Regulations (NI) 1995 and the Code of Practice for Goats' Milk (Northern Ireland Farm Quality Assured Scheme).

Herd owners must comply with the Identification and Movement of Sheep and Goats Order (Northern Ireland) 1997. All holdings that keep sheep and goats must be registered with DARD. All sheep and goats must be identified with either a tattoo or an ear tag that identifies the holding of origin before they move off a holding. For registration and details of requirements contact your local Divisional Veterinary Office.

A producer wishing to import goats must apply for a General Import Licence from Animal Health and Welfare Division, Dundonald House. There are a number of conditions attached to this licence.

Further contacts and information

Quality Assurance, Milk Section
Room 1019, Dundonald House, BELFAST BT4 3SB
Tel: 028 9052 5001
E-mail: qadadmin@dardni.gov.uk

The Veterinary Service, DARD
Dundonald House, BELFAST BT4 3SB
Tel: 028 9052 0100 Fax: 028 9052 5012
E-mail: david.irwin@dardni.gov.uk
Or contact your local Divisional Veterinary Office

Northern Ireland Goat Club
35 Mullaghdrin Road, DROMARA BT25 2AG
Tel: 028 9753 2685
E-mail: terry.hanna@virgin.net

Goat Products Enterprise Ltd
Mrs Hazel Dunn (Secretary)
Ardunshin, Brookeborough,
Co. Fermanagh BT94 4EH
Tel: 028 8953 1492

Loughry College, The Food Centre
COOKSTOWN
Tel: 028 8676 8114 Fax: 028 8676 1043
Email: loughry.food.centre@dardni.gov.uk

Stephen Allen
Erganagh Dairies, 29 Erganagh Road, CASTLEDERG
Tel: 028 8167 0626

This information sheet has been compiled by Rural Enterprise Advisers.

For advice and guidance on your farm diversification idea contact your local Rural Enterprise Adviser. For details of the adviser in your area:

Tel: 028 9052 4406.
E-mail: ruralenterprise.afds@dardni.gov.uk
Website: www.ruralni.gov.uk/farmdiversification

ISBN 1 85527 497 3
© DARD November 2001

The Agri-Food Development Service is an integral part of the Department of Agriculture and Rural Development

