

**Dairy Industry Review Group Report (2013 -14)**  
**(A Commerce and Employment Department**  
**Working Group)**

**DAIRY FARMING IN GUERNSEY**  
**AND THE FUTURE**



**A PLAN FOR THE LONG TERM FUTURE OF THE DAIRY**  
**FARMING INDUSTRY IN GUERNSEY**

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## **Introduction from the Dairy Industry Review Group Chairman**

The Dairy Industry Review Group is grateful for the time and interest put into the consultation process by all those it met during 2013.

It is well and widely recognised that the dairy industry makes a valuable contribution to the Island and Island life, providing milk and high quality dairy products. We also benefit from dairy farming activities that nurture about 80% of the Island's farmed land, preserving our traditional countryside and fields and caring for hundreds of miles of hedge banks, which are a wildlife sanctuary and habitat resource, intricately criss-crossing our island landscape.

The consultation process did not reveal a single person or organisation that had neither interest in nor passion for the industry and there has been unanimous support that what we have must be protected, encouraged, and supported.

Protection and support need not be backward looking or lacking in ambition for the industry. The Review Group believes firmly that the vision set out in this report will ensure that a protected commercial environment is maintained, within which the industry can continue to produce fresh, local foods of high quality, managing the Guernsey countryside and cattle breed in a responsible manner.

It should also foster balanced partnerships that will allow entrepreneurial skill and effort to be rewarded, while ensuring that all sections of the industry, the Island's consumers, and the Island's taxpayers, will get a better deal in the coming years.

What is needed is action to produce greater self-reliance and sustainability and, where possible in a changing and challenging commercial world, more clarity for this industry. The report, that has come out of the review process and which is based on the facts and opinions collected, proposes a coherent plan for the future for the dairy industry.

The proposals aim to bring about this vision giving dairy farmers the greater certainty they must have to invest in the future of their businesses. These proposals also provide for them to have a greater voice in, and a responsibility to shape, the future of their businesses alongside a reduced level of government interference and expenditure on the industry.

The changes proposed in this report will not put the industry, or the future of dairy farming, at risk. However, we believe that they are a coherent set of vital steps towards building a sustainable future for dairy farming and ensuring we don't lose the benefits it brings to the Island.

**Deputy Kevin Stewart, Minister and Review Group Chair**

## Report Contents

This report is a record of the views of the Dairy Industry Review Group following the extensive consultation process completed in 2013. Having described the main industry background and events in **Part 1**, **Part 2** of the report looks at the connections and partnerships between the States and the dairy industry. The Review Group's conclusions are set out throughout this part of the Report.

The intention of **Part 3** is to draw these conclusions together to give the main themes that have emerged in the Review.

**Part 4** then sets out the **Coherent Plan** of the Review Group for a sustainable and increasingly self-reliant dairy industry. **Part 5** focusses on the key actions required to make the important changes envisaged over the next few years that will bring about the Review Group's vision.

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## EXECUTIVE SUMMARY

### Background

In the late 1990s, the dairy industry was failing financially, environmentally, and publically as the intensification of farming took hold to bolster falling farm profitability. The Dairy was losing money every year and the Island's smaller dairy farms saw their businesses being strangled by a falling milk price, which was a consequence of over-supply from larger farms.

The industry was thought to be at serious risk of imports of fresh milk that were presumed to be about to be brought to the Island by the increasingly powerful multiple food retailers. Imports would take market share and undermine the viability of the Dairy and dairy farming.

With approval from the States in 2000, the system of Dairy Farm Management Contracts was started in 2001. These contracts were linked to a Dairy Farm Management Payment funded from General Revenue and to a milk quota system intended to reduce milk production to match the Island's needs and reduce loss making Dairy exports. The price of this intervention was some £2 million per year funded from the central purse.

The contract system was designed to create an alternative income stream for dairy farms and so allow the Dairy to pay less for milk from those farms. With reduced raw material costs, the retail price of milk could be reduced and local milk remained at or below the price of equivalent, high quality, Channel Island milk types. The Dairy started to make a trading surplus which provided cash for re-investment. Farm profitability improved.

Attempts to liberalise aspects of the dairy industry in 2005 produced strong opposition. After a Scrutiny Committee review and the defeat of a number of proposals, the milk distribution system stayed much as it was with a fixed milk retail price. A Milk Price Review Panel was created to give an independent assessment of the cases from stakeholders for amended milk prices.

Farmers worked positively with the Department in the intervening years to bring about changes to the farm contracts to give better targeting of the environmental work they did. Significant increases in charges to farms for farm services were phased in between 2008 and 2010.

In 2008 the States supported proposals that sought to clarify the question of exclusivity over the distribution of Guernsey Dairy milk and milk products. At that time an amendment approved by the States asked for an independent report on the industry.

The independent review was presented to the States in 2011. The States, accepting an amendment proposed by Deputy A Le Lievre, resolved to note the report and directed the Department to do its own review to produce a vision for the industry.

The States' resolution called for:-

**The Department's comprehensive and coherent vision for the long term future of the dairy industry in Guernsey; and**

**Any recommendations that the Department considers necessary to realise its comprehensive and coherent vision, such recommendations to include, as far as possible, cost implications, together with indications of how such expenditure could be funded.**

## **The Current Review**

The Department formed a Dairy Industry Review Group comprised of three political members of the Department as follows:-

- Deputy Kevin Stewart – Chairman
- Deputy Laurie Queripel
- Deputy Heidi Soulsby

Through much of 2013, the Review Group met industry stakeholders and experts to consider and discuss their views of the needs of the industry and of specific stakeholder groups. The Review Group considered a variety of evidence provided by those it met and also statistical summaries of the industry.

This report records the Review Group's research findings and conclusions, and presents its plan for the future of dairy farming. It describes the changes it believes are necessary to bring about that vision.

**Note:** After its initial drafting was complete, this report was the subject of full discussion and further input from Deputies Brouard and De Lisle of the Commerce and Employment Department. The Report and its conclusions have the full support of the Members of the Department.

## Conclusions of the 2013-2014 Dairy Industry Review

### A Valued Local Industry ... and more

The dairy industry is an asset of great value to the Island. It and the Guernsey cattle breed are completely authentic and irreplaceable parts of the Island's heritage, environment, and Island life.



The Industry has adapted well to the challenges of the last decade, with farms curtailing production in total to match the Island's overall need for liquid milk. With the number of farms having reduced by a half (from 30 to 15 farms) over this period, individual farms have increased production to replace that lost when farmers have retired.

Farms have adapted to the regulation that has come from Dairy Farm Management Contracts, but the greatest challenges are to come if, as anticipated, the number of farms reduces further. The remaining farms will need to expand, investing in vital equipment that will be needed to run larger herds. There will also be a need to ensure that new entrants looking to take over farms, as the current owners retire, are able to do so.

While Guernsey Dairy milk and products are well regarded and loyally supported by Islanders, the whole industry will have to address the control of costs to avoid the consumer having to pick up an increasingly large bill to ensure the industry survives.

The evidence considered by the Review Group all points to an industry that will need a degree of protection to ensure a ready market exists for its products – principally the current 6.5 million litres of liquid milk sold each year – combined with sufficient relaxation of the regulatory burden that inhibits the much needed commercial influences driving change for the better and which imposes a large and partly unnecessary cost on the States.

The past 12 years has produced a stabilisation in the industry and that, combined with improved control over imports of milk, will mean that the input of taxpayers' money can start to reduce annually. The Review Group considers that with gains from improved operating efficiency and the freeing of the retail price of milk, the support payments for dairy farming, that create a second income stream for farms via Dairy Farm Management Contracts, can be halved to £1 million a year by 2020.



### **The Guernsey Cattle Breed**

Protecting the local Guernsey cattle breed is one of the key reasons and justifications for controls over the importation of milk and other breeds to the Island. Support for the Guernsey cattle breed is in line with policies for the protection of the rarer and distinctive breeds in Europe. Protection, by the enabling of a more self-sustaining dairy industry on the Island, is the most cost effective approach in the future.

### **The Guernsey Dairy**

The Dairy is at the heart of the industry. It is well regarded and profitable and must be free to operate efficiently, processing milk produced on local dairy farms.

The Dairy has weathered a number of storms in the past decade and has, every time, demonstrated the skill and dedication of its staff. Its investment programme continues to improve operational efficiency and product quality and must continue.

The Guernsey Dairy should stay in overall States control, but with a governance structure that allows it greater independence to act in a commercial manner for the good of the Island and the dairy industry, but largely freed from the constraints of political and States control. If the States agree in principle to this recommendation, careful research should be done by the Department prior to a States Report being brought forward with proposals on the best way to achieve these overall objectives for the future of the Dairy.

The Guernsey Dairy and its future relationship with Island Dairy farmers is central to a successful future for the industry. Dairy farmers must be fully behind the Dairy and become responsive to the needs of their market. In recognition of the key importance of the partnership between producer and processor, farmers should have a permanent place on the Board of a new Guernsey Dairy.

The Guernsey Farmers' Association must take responsibility for, and play an active role in, guiding, coordinating, and encouraging farms to adjust calving patterns to sustain autumn and winter production to remove the risk of undersupply in winter and early spring.

The Dairy should dispense with the existing Trade Counter arrangements and move to a situation where any commercial customer wishing to purchase any of its manufactured products (cream, cheese, butter etc - but not fresh milk) for retail or commercial sales is free to do so. These arrangements should start from 1<sup>st</sup> January 2016.

The farmer's Producer Price for raw milk should be set by the Dairy in collaboration with farmers. The Dairy should work with farmers to investigate the differential pricing of raw milk to reflect the value of, for example, higher butter fat content.

The Dairy's Gate Price for milk should be set by the Dairy and must be non-negotiable.

The Retail Price of milk should no longer be controlled. With no retail price to set and a new arrangement for setting the producer price, the work of the Milk Price Review Panel can stop.

### **Milk Distributors and Retailers**

The Review Group recognises that there may be aspects of the current milk distribution system that can be improved (such as cool chain handling), but it also recognises the investment of money, time and effort that has gone into existing milk distribution businesses.

So, whilst it would prefer this aspect of the dairy industry to operate in a straightforward commercial manner, the Review Group considers that a degree of protection is justified for milk distributors at the present time.

The Milk Ordinance must be brought up to date, replacing all Milk Retailer's Licences, whether actually issued or not, with new, Milk Distribution Licences. These new licences will not establish or control milk round zones.

In the future, only distributors issued with a new licence, which will replace the existing and unclear licence arrangements will be able to purchase milk from the Dairy. The Dairy should be directed that it shall not sell milk directly to shops or take on milk deliveries of any sort.

The Dairy will set out the terms and conditions of trading with holders of Milk Distribution Licences in non-statutory Milk Distribution Agreements.

In the future, and with the provisos mentioned above, change and restructuring in the distribution sector should still come about as it does now through commercial discussions, negotiations, and decisions between distributors and between distributors and their customers.

This principle must apply also to zoning and there is no case, or need, for the Department or the Dairy to become involved, other than in exceptional circumstances to ensure that supplies to key outlets are maintained.

### **Dairy Farmers**

An early task for the Dairy and farmers must be to amend the current system of milk quotas for introduction in 2015 and in so doing remove commercial constraints on farm expansion.

It would be valuable for the farmers to work closely with the Dairy to establish more commercially minded Milk Supply Agreements that match farm milk supply to the needs of the market.

Dairy Farm Management Contracts should continue, as they are the key to the delivery of some of the Island's wider strategic objectives for the environment through a relatively low intensity farm management system. Future contracts must maintain the current animal welfare and breed improvement requirements, the limits on stocking density, and the need to have a biodiversity action plan in place for the land farmed.

The fund for contract payments should be cut over a five year period starting in 2015 and reducing to an annual commitment of £1 million by 2019. A further review should be done at the end of this period to assess the need and level for such support beyond that date.

### Legislation

The legislative controls protecting the Guernsey cattle breed should remain in place as they are essential for the future of the breed.

A new Milk Ordinance should be drafted without delay and it should be brought into force as soon as possible. Useful powers in the ordinance must be strengthened and brought up to date, providing clear and robust control over the importation of milk and modernising out of date elements in this legislation. The system of licensing affecting milk distribution must be amended.

### The Changing Industry and New Entrants

The Department should evaluate the benefit of providing financial assistance to existing farm businesses and new entrants, perhaps as part of a wider business development scheme.

### Land and Planning

Agricultural and open land is protected and should continue to be left undeveloped, leaving a strategic land bank for the future of food production and farming. Suitable modern farm buildings should be protected for truly agricultural purposes and not given permission for a change of use. Farmers and new entrants should be able to develop the facilities needed to support the operation of their farms.

Some flexibility in planning should exist to assist farmers who want to develop uses linked to the operation of a working farm, such as farm shops, to sell the farm's produce and so encourage the buying of locally produced food and create interest for visitors and locals.

### Farm Services

Farm Services are a vital and well managed service for the industry. It represents good value for money and those involved should continue to work closely with the industry and identify further efficiency improvements in the coming years, as they have done in the past.

## **A Coherent Plan for the future of the Dairy Industry**

The Review Group's proposals provide a suitable balance of degree of **certainty and confidence** for the industry, providing **some protection** while **reducing the regulatory burden** on it.

This should give all parts of the industry a **commercial stimulus** to adapt and evolve for the future and **respond to the market** for local dairy products. As a result this should satisfy the wish of Islanders to see its valued milk and dairy products continue to be available and the iconic local Guernsey cattle breed continue as a part of our countryside and culture.

Ensuring there is **robust control over imports** of milk, combined with an emphasis on the **efficient commercial operation of the Dairy and dairy farms**, will allow the States to **reduce its annual spending** on the industry.

The elements of this coherent vision and plan can be summarised in the following ten points:-

- 1: **Effective statutory control over the importation of milk.**
- 2: **A continuing commitment to the Guernsey Breed.**
- 3: **An independent, but still States owned, Dairy.**
- 4: **A firm commitment from farmers to a year-round supply of milk for the Island.**
- 5: **A simpler approach to milk pricing in the industry.**
- 6: **The continuation of Dairy Farm Management Contracts.**
- 7: **Support for farm business development.**
- 8: **Protection for agricultural land and flexibility for ancillary uses.**
- 9: **Modernised arrangements for milk distribution and retailing.**
- 10: **A new Milk Ordinance.**

## **Taking the Plan Forward**

### **The Required Actions & Target Dates**

- Milk quotas should be suspended and revised arrangements and Dairy Supply Contracts introduced **(Target - 2015)**
- The Dairy Farm Management Contract annual payments fund should reduce over a 5 year period to £1million **(Target – budget reductions commencing in 2015)**
- The end of control of the retail price of milk **(Target - 2015)**
- The Milk Ordinance to be revised and introduced as soon as possible **(Target - 2015)**
- Milk Distributors to have Milk Distribution Licences issued to them in place of Retailers' Licences **(Target - 2015)**
- All Guernsey Dairy manufactured products (excluding milk) should be available to any commercial customers to buy direct from the Dairy **(Target - 2016)**
- A report on a future independent, but States owned, Dairy with farmer involvement to be prepared **(Target - 2015/16) (Subject to States approval in principle )**

**The Key Outcomes sought from the Review Group's proposals**

- The continuation of the Guernsey Cow as the sole dairy cattle breed on the Island within a self-sustaining farming sector.
- The continuation of the Guernsey cattle breed development programme.
- The Guernsey Dairy operating with greater efficiency, freedom and responsibility.
- The Guernsey Dairy investing in a timely manner to improve the reliability of its operation and the quality of its products.
- Dairy farms investing with confidence in the future, maintaining production in order to supply the Island's liquid milk needs.
- Farm production closely aligned to demand throughout the year.
- Farmers and the Guernsey Dairy working together to plan the future of the industry.
- The dairy industry remaining environmentally responsible, with high animal welfare standards.
- Effective control of milk imports.
- Consumers benefiting from retail price competition.
- Milk distribution and doorstep sales continuing in a normal commercial environment.
- The Island's countryside retaining its traditional appearance with a strategic reserve of open land for the future.
- The cost to the Island of support of dairy farming reducing.

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## PART 1

### Review Background



## 1.1 Introduction –Terms of Reference and Method of Operation

1. The Review Group considered recent dairy industry reviews and paid particular attention to the work of the independent Dairy Industry Review Panel (Billet XIX Vol.2 2011).
2. Following acceptance of an amendment proposed by Deputy A Le Lievre, the proposals in the independent report were not voted on and the report was noted by the States in November 2011 after a relatively short debate.
3. The States resolved at that time that a further report should be brought forward, but, reversing a previous decision, the States directed that the next report should not only be presented by the Commerce and Employment Department, but this time it should be the result of a review by the Department itself.
4. The decision of the States, therefore, was to dispense with independence in favour of more direct accountability for the resultant proposals and involvement in their production.

### **2011 States Resolution (following acceptance of the Le Lievre amendment)**

On 30<sup>th</sup> November 2011 the States resolved to note the Report of the independent Dairy Industry Review Panel.

The States directed the Department to present to the States of Deliberation a report containing:-

**The Department's comprehensive and coherent vision for the long term future of the dairy industry in Guernsey; and**

**Any recommendations that the Department considers necessary to realise its comprehensive and coherent vision, such recommendations to include, as far as possible, cost implications, together with indications of how such expenditure could be funded.**

5. The Department's Dairy Industry Review Group commissioned and published a broad and comprehensive statistical digest of information on the dairy industry in March 2013 in the form of a consultation paper that was made freely available to all consultees and those working in the industry. (See Appendix 1)
6. As well as numerical information, the consultation paper also gave written descriptions and comment to set the data in context, with explanatory notes to assist in its interpretation.

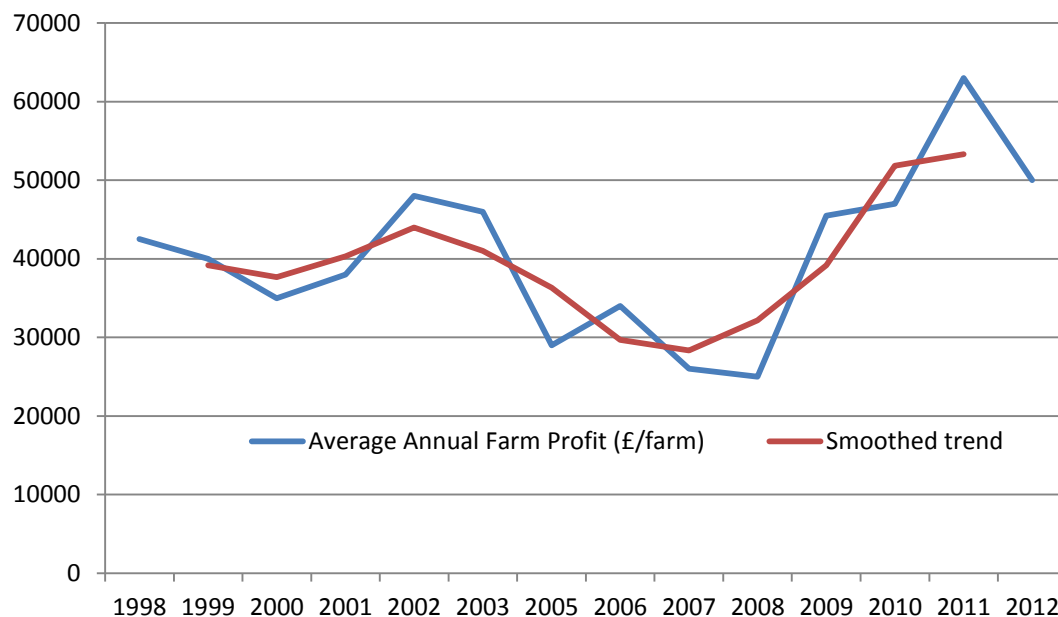


7. No comment has been received during the consultation to cast doubt on the accuracy of the consultation paper as a reference point on the industry and, broadly speaking, its performance.
8. The Review Group has met an extensive list of consultees (detailed in Appendix 2) as part of its investigations. In all cases they were asked for their view of the future of the industry, what they felt were the challenges facing it, and how these challenges might be overcome to create a more certain and sustainable future.
9. The discussions considered the recorded industry trends and asked where the consultees felt that improvement could be made that would benefit the dairy industry.
10. To give a framework for these discussions, the Review Group made it clear that they gave a high priority to the Guernsey cattle breed and the continuation of the supply of locally produced milk that would continue to be sufficient for the Island's needs.
11. So that there could be full and complete consideration of issues, the Review Group did, on occasion, invite consultees to return for additional discussions. This approach was taken to make the consultation as open as possible and ensure it was not rushed. However, this did put pressure on the timetable intended for this process and resulted in the Department being unable to run a second period of consultation as originally envisaged in the summer of 2013.
12. It also made it difficult for the final report to be presented to the States before the end of 2013 as specified in the 2011 resolution. States Members and key stakeholders were advised in early November of this situation.
13. The Dairy Industry Review Group (with staff support from the Department) comprised:-
  - Deputy Kevin Stewart – Chairman
  - Deputy Laurie Queripel
  - Deputy Heidi Soulsby

## 1.2 The Dairy Industry and States' Involvement over the last 15 years

14. Fifteen years ago in the late 1990s, the dairy industry was considered to be failing financially, environmentally, and publicly, as intensification of farming took hold to bolster falling farm profitability.
15. It was thought to be at the mercy of imports of fresh milk that were presumed to be about to be brought to the Island by the increasingly powerful multiple food retailers.
16. The Dairy was losing money every year and the Island's smaller dairy farms saw their businesses being undermined by a falling milk price, which was a consequence of over-supply from larger farms driving down the average producer price that could be paid by the Dairy.
17. Also the view on the Island was that, along with many other forms of pollution, the once tolerated year round nutrient rich runoff from dairy farms was no longer acceptable.
18. The vision at the time was to steady the situation with the application of a good deal of regulation (such as production quotas and Dairy Farm Management Contracts), and money. The vision was not long term and there was no exit strategy, but the situation was considered to be sufficiently urgent that something had to be done.
19. With approval from the States, the current arrangements were introduced in 2001, at a time when the States could afford the funding and was prepared to intervene. While farmers were not pleased with the loss of independence that this system introduced, it was clear that, after initial resistance, a cure of sorts to a number of the dairy industry's ailments had been brought about.
20. Excess milk production was controlled; the Dairy could again function with an operational surplus and could start to fund a programme of much needed capital investment. Farms could focus on farming, care of the countryside, and pollution reduction as profits stabilised and increased. Stocking density and intensification were controlled and the industry's breed improvement programme was given further support.
21. In 2001 the retail price of milk dropped from 92 pence to 66 pence per litre as the introduction of a new income stream for dairy farms (from Dairy Farm Contracts and the associated payments) enabled the Dairy to dramatically cut the price paid to producers for raw milk.

22. In 1999 the Agriculture and Milk Marketing Board commenced an annual farm accounts survey to monitor the financial performance of dairy farms. The data, from 14 solely dairy farms, is collected and analysed by the Royal Agricultural University.
23. In the following graph, data from the survey of farm accounts over the past 15 years is presented (Blue line) with a trend line to smooth out year by year fluctuations (Red line).



24. The graph shows the falling profitability of dairy farms at the end of the 1990s, the rise and the subsequent fall (largely due to a period of static retail and producer prices caused by political disagreements following the 2005 Scrutiny review). Finally, the more positive profitability trend in the last 5 years is clear.
25. However successful the policies may have been (and in many respects they were), this approach also introduced a relatively high dependency culture with an administrative burden on the States and a total annual bill to the taxpayer of some £2.25 million pounds for support to farm operations.
26. Despite introducing a 50:50 charging policy for States supplied farm services from 2007, the financial commitment to the industry is much the same to this day. What is more, the impression was created that the States was now “running” the dairy industry.
27. In the absence of incentives or the potential to drive greater efficiency into the industry and in the face of ever rising costs, the price of milk has risen steadily since 2001.

28. As the industry got used to this new system, farmers could see that the introduction of a milk quota system had removed the competition that had existed between farms, had controlled production, and had stopped the producer price being driven down. However, these changes also came with bureaucracy and rules. And furthermore, the rules, although agreed through consultation and reflecting the farmers' wishes, became rather complicated.
29. It was also clear after a few years that the quota system itself had the undesirable effect of stopping, or at least hindering, the development of farm businesses. Of particular concern was that, as farmers retired and other farms needed to expand, they were held back from doing so by the "production cap" that quotas brought about.
30. The Dairy's finances stabilised and loss making exports of products stopped. Also, while much has been achieved over the years to quietly and effectively improve the quality and reliability of its production processes and develop market opportunities, the Dairy is largely an unchanged organisation.
31. Reports from people with knowledge of the dairy industry elsewhere have complimented the Dairy and its staff for the quality of the work they do and the products they make. However, all have pointed out that with further investment in its equipment and operating systems, the Dairy could function in the future more like equivalent commercial dairies.
32. The Island's Milk Distributors accepted their own contract system in 2001, but found themselves increasingly in dispute with the Department over licences, exclusivity, and zones. Distributors' contracts were ended by mutual agreement in late 2003.
33. Distributors later promoted the establishment of independent regulation of the fixed pricing system for milk and, as a result, the Milk Price Review Panel was introduced in 2007. Despite initial support of an independent assessment, after a few years of below RPI increases in the retail margin (the "retail margin" is the difference between the Dairy's gate price and the fixed retail price) distributors' support for the current system waned.

### 1.3 Key Questions

34. In the light of this history, the key questions considered by the Dairy Industry Review Group were:-
  - (a) Is this situation capable of improvement to give the dairy industry greater stability and resilience in the future? And
  - (b) Is it possible to sustain the local dairy industry (the Guernsey cattle breed and Guernsey milk) in a way that is more appropriate for the financial realities of today and what are likely to be those of the coming years?



## PART 2

### Reviewing the Dairy Industry



## 2.1 The Guernsey Cattle Breed

35. One of the clearest pictures to come out of the consultation for this review was that the Island and the industry are the custodians of a special breed of cattle that has served the Island well for some 150 years since its development and its qualities were recognised and protected by local farmers and the breed society.



36. The Review Group was very grateful to representatives of the breed society for their comments and written evidence presented as part of this review process. The Society has supplied assessments of the breed, its future, and the direction of the already successful breeding programme. This has been written by Dr Maurice Bichard who has advised on this programme for many years. Dr Bichard's report is appended to this report (Appendix 6) and clearly demonstrates the successful, thorough, academic, and practical programme in place to protect and improve the breed.

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*"Cows that are both productive and healthy are the most profitable. These are the cows that milk well, but are less likely to suffer from functional disease and infertility and are more likely to live long and stress free lives. Our efforts are directed towards these goals"*

*RGA submission to the Review*

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37. The breed improvement programme is a collaboration between the Department's Farm Services section and farmers, represented by the local cattle breed society. The Royal Agricultural and Horticultural Society (RGA) - seeks to spread the genetics of the best cows in the breed through their sons by using a large number of relatively unrelated young bulls sparingly and at random through the whole cattle population; consultation and discussion on the operation of the programme proceeds regularly through the Breed Development Panel.
38. Maintaining this breed will also retain it as a world heritage genetic resource, helping to resist the trend of holsteinisation that has seen the familiar, high yielding, black and white breed becoming overwhelmingly used around the globe for dairy production. This restricted genetic base increases the risk that the population may not be able to resist a bovine health risk.

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*"During the second half of the 20<sup>th</sup> Century, animal production in Europe became more intensive and specialized. A decreasing number of breeds or breeding lines [now] produces a growing percentage of animal products. In most farm animal species, a very limited number of breeds is widely used. ....The importance of conservation of within and between breed genetic diversity is widely recognized. Irreversible loss of breeds or genetic variation between breeds is undesirable."*

*EuReCa (= European Cattle Breeds) project.*

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39. There is recognition in the European Union of the need to conserve distinctive local breeds and twenty years ago it started providing support funding for rare breeds. More recently the EU funded the EuReCa project<sup>1</sup> which was aimed at assisting the conservation, development and sustainable use of local or regional cattle breeds.
40. An example of where a previously overlooked genetic characteristic can have the potential to improve human health (in this example) is in the debate over the health benefits of "A1" and "A2" beta-casein protein in milk. There have been reports linking the consumption of milk containing A1 protein to several human health problems (diabetes, autism, schizophrenia and heart disease) in some people.
41. A1 milk is widely consumed in Europe. Research has shown that 96% of Guernsey cows produce only A2 beta-casein containing milk. The benefits are medically unproven, but it illustrates the potential value of maintaining the diversity of farm animal genetic resources.

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<sup>1</sup> See also "Local Cattle Breeds in Europe" - Heimstra, De Hass, Mäki-Tanila, Gandini 2010



42. The Guernsey cow is a distinctive local breed and one of a number in Europe whose numbers have fallen such that it could be considered to be at risk. In the case of the Guernsey cow it is saved from being 'endangered' by the fact that there is still a reasonable, although reducing, population in North America and, to a lesser extent, in some Commonwealth countries.
43. The world population of Guernsey cattle has reduced by some 50% in the last 10 years. The current number of pedigree Guernsey cows worldwide is 12,000 (mostly in the USA and Canada) with 1,500 being in Guernsey.

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*"These breeds are recognised as important elements of agro-biodiversity, of agro-ecosystems and of our cultural heritage in Europe. The most secure conservation strategy for those breeds is to promote measures which contribute to self-sustainability of the breed."*

*EuReCa Project*

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44. The Review Group considers that the evidence of the scientific value arising from protection of the Guernsey breed and the importance of that being based on a self-sustaining population, is a strong and convincing justification for the maintenance of statutory controls on the import of cattle, cattle genetics, and milk.
45. This means strict control over the importation of other cattle breeds and control over milk importation, to maintain as much as possible the size of the Island population of this distinctive breed by ensuring a viable dairy industry exists.
46. That is not preserving the breed in some sort of museum of the Guernsey cow, but as a living and viable breed, albeit one protected from the market economics of the black and white cow that have driven intensive farming on a massive scale.
47. The Review Group is certain that the States should not contemplate any weakening of the current stance over imports of milk or the use of other cattle breeds in the Island; where possible these controls should be strengthened.



*"... but it is with pleasure I can call attention to some great advantages which residents and visitors to Guernsey enjoy. The natural beauties of the Island are such that no one can fail to appreciate them, the abundant sunshine (and in the year 1912 we hold the record for the British Isles), the Milk at once so rich in fat and free from tuberculosis, are points much in favour of Guernsey that it is difficult to over estimate their value."*

*Dr H Bishop MoH 1912 Report - taken from the 114<sup>th</sup> Annual Report of Dr S Bridgman 2014*



48. The Guernsey cow is also so instantly recognisable in the local countryside scene that it is hard to imagine us doing without these docile and attractively coloured dairy cattle in our fields.

***The Review Group concluded that:-***

- 1:** The Guernsey cattle breed is a distinctive local breed the maintenance of which will enhance the available pool of world farm animal genetic resources.
- 2:** Support for the breed is in line with policies for the protection of the rarer distinctive breeds in Europe. Protection for dairy farming and the breed, by the enabling of a self-sustaining dairy industry on the Island, will be a more cost effective approach in the future.
- 3:** Protecting the local Guernsey cattle breed is one of the key reasons and justifications for controls over the importation of milk and other breeds to the Island and recognises the change in attitude that now accepts the value of maintaining genetic resources as a legitimate balance to the free market and movement of goods in Europe.

## 2.2 The Current Partnership between the States and the Industry

### (A) The Guernsey Dairy

49. The Review Group heard minimal criticism of the Dairy during its extensive consultation period. The Dairy is no longer the butt of ill-informed comment, having quietly gone about its business in an effective and open manner, but generally out of the public limelight.
50. Public support for the Dairy is very strong as can be seen in the report of the 2013 Island Residents' Survey commissioned by the Dairy Industry Initiative Group (See Appendix 3).

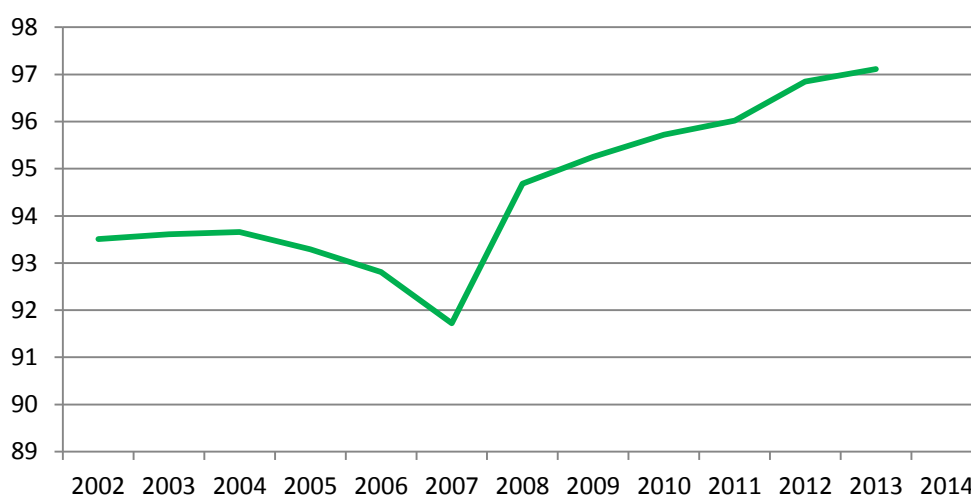
#### An Overview of Dairy Operations

51. The Dairy has been able to modernise its operation, investing in the people it employs and the facilities they operate to provide high quality products supplied to every Island home and, in the case of salted butter, exported successfully and profitably to the UK.
52. The Dairy has a dedicated and knowledgeable staff that support its operations with skill and hard work. This results in the Island enjoying a very reliable supply of superb quality milk and dairy products all year round. The Dairy's operation is marked by efficiency, reliability, and quality, and received a great deal of praise during the consultation period.
53. Full numerical details of the operation of the Dairy are available in its published annual business plans, and the pages of its website ([www.guernseydairy.com](http://www.guernseydairy.com)), set out clearly its aims and so will not be repeated in this report. Furthermore, as this is not a report on the Guernsey Dairy, the Review Group decided it would focus on the role of the Dairy in a sustainable and cost effective industry of the future, rather than in detailed analysis of its operations.



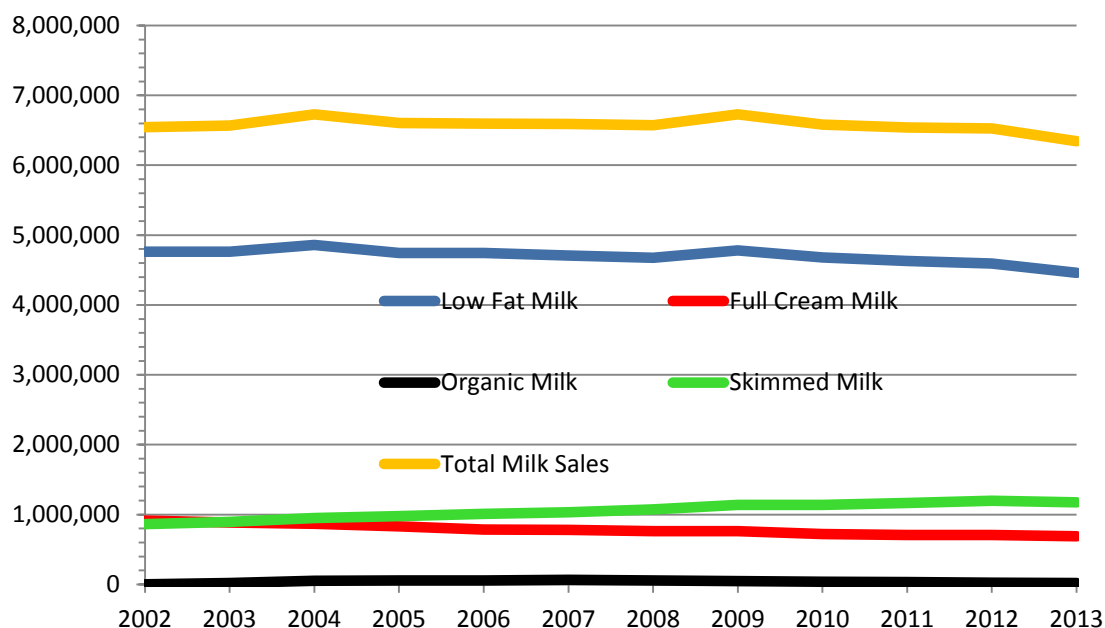
54. As an example of its drive for efficiency, the Dairy's operational control improvements have, in the last 5 years, seen increases in efficiency (waste reduction) with some 300,000 litres of milk processed each year that would have been lost in the past.
55. That volume is equivalent to the annual output of one medium or two small dairy farms and has made a clear difference, reducing production costs and helping avoid the need to import milk to "top up" local supplies in the winter.

### Raw Milk Utilisation (%)



56. A small Dairy will always have some vulnerability despite the best laid plans and this was highlighted when a vital piece of equipment broke down in May 2013, reducing output to a trickle for 3 days. This incident and the three day interruption (caused by extra-ordinary technical problems) to local milk supplies led, not to public outrage, but to an understanding and an appreciation of the work that is routinely done by the dedicated staff to supply us all with milk and Dairy products every day of the year.
57. A brand initiative group - The Dairy Industry Initiative Group (DIIG) - was formed in 2011 with distributor and farmer representation, to work together to support and promote the buying of Guernsey Dairy Products. The DIIG has commissioned consumer surveys for the last two years and the results of the most recent one (See Appendix 3) suggest that public support is strengthening from an already high position. The Review Group found a close match between many of the publicly expressed ideas in these surveys and the direction of its vision for the industry.

### Annual Trend of Milk Sales (litres) 2002 - 2013

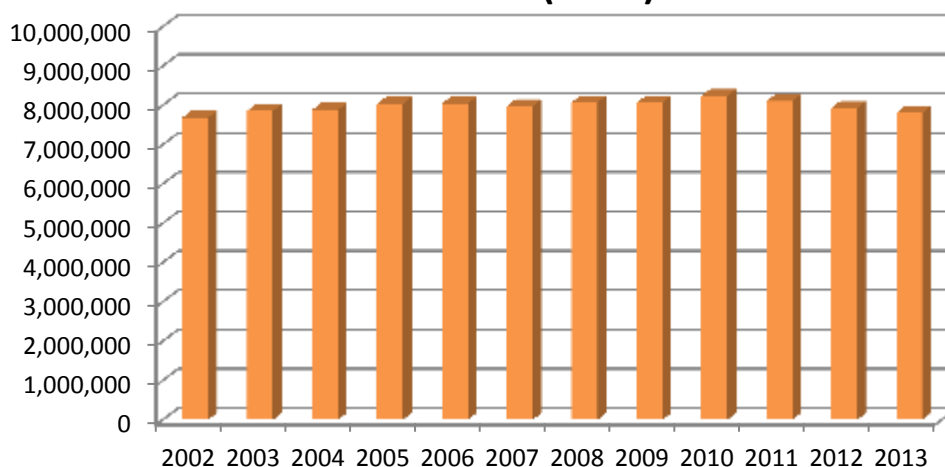


*Note: Sales in 2013 were reduced due to the equipment failure and supply interruption in May of that year.*

#### Milk Supply to the Dairy

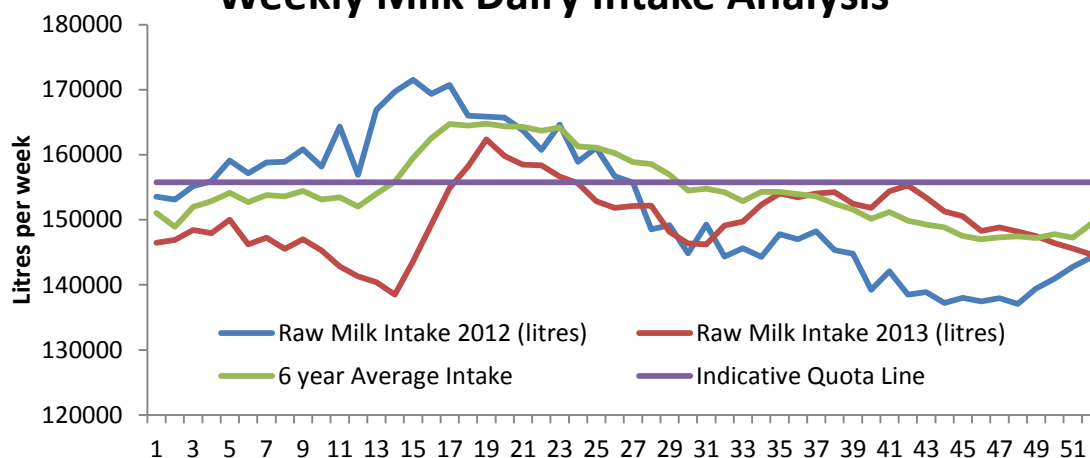
58. Of fundamental importance to the successful operation of the Dairy, and the success of the industry as a supplier of fresh milk to the Island, is year round farm production. If there is too little milk, the Dairy would be unable to supply the local fresh milk market without importation, which is costly. With too much production, the Dairy has to find viable uses for the milk that is in excess of that consumed on the Island as fresh milk.
59. With farm production approaching 10 million litres annually in the late 1990s (see section 1.2) milk quotas were introduced in 2001 with Dairy Farm Management Contracts to reduce farm production. The quota system defined the maximum amount of milk that a farm could supply to the Dairy and receive the Dairy's "A" price. Milk produced above quota receives the "B" price, currently 12p per litre, which is a price well below production costs.
60. Based on calculations of the market for liquid milk by the Dairy (which have proved to be correct) the annual milk quota total was set at 8.1 million litres. This represented a reduction in annual production of some 18% compared to farm output in the late 1990s.

### Guernsey Dairy Raw Milk Intake from Farms (litres)



61. Annual farm production was reduced from levels of the late 1990s, although in the early years of the Farm Contract system farmers culled too many animals and production dropped too low. Over the next 3 years farmers corrected this situation and production rose back to the required 8.1 million litres.

### Weekly Milk Dairy Intake Analysis



62. From the data (Appendix 1 and the chart above) it can be seen that there is a problem of lower than ideal winter production in some years. In these cases the Dairy has to import small amounts of milk to supplement supplies.
63. The Dairy imported catering packs ("pergals") of milk from Jersey in the winter of 2012, but there is a limit to the catering market for that particular product. If there were a larger farm milk production shortfall, it would be necessary to import milk for processing and packaging for retail sales. Whilst this is most feasible in the summer, in the winter months sourcing additional milk from Channel Island breed herds is difficult and the Dairy would have to turn to more standard milks to maintain supply.

64. The Review Group was advised that, rather than allow a shortfall to occur, it is essential that dairy herd management is coordinated across the industry to ensure that the risk to supply in the winter (or at any time of the year) is reduced to a minimum. This can be done by the management of calving patterns across the industry.
65. The Review Group was encouraged to learn of the joint working between the Dairy and farms to rectify the winter undersupply problems. 2013 has seen more production in the autumn and winter than in recent years and it appears that lessons may have been learnt. This is crucial for the future.

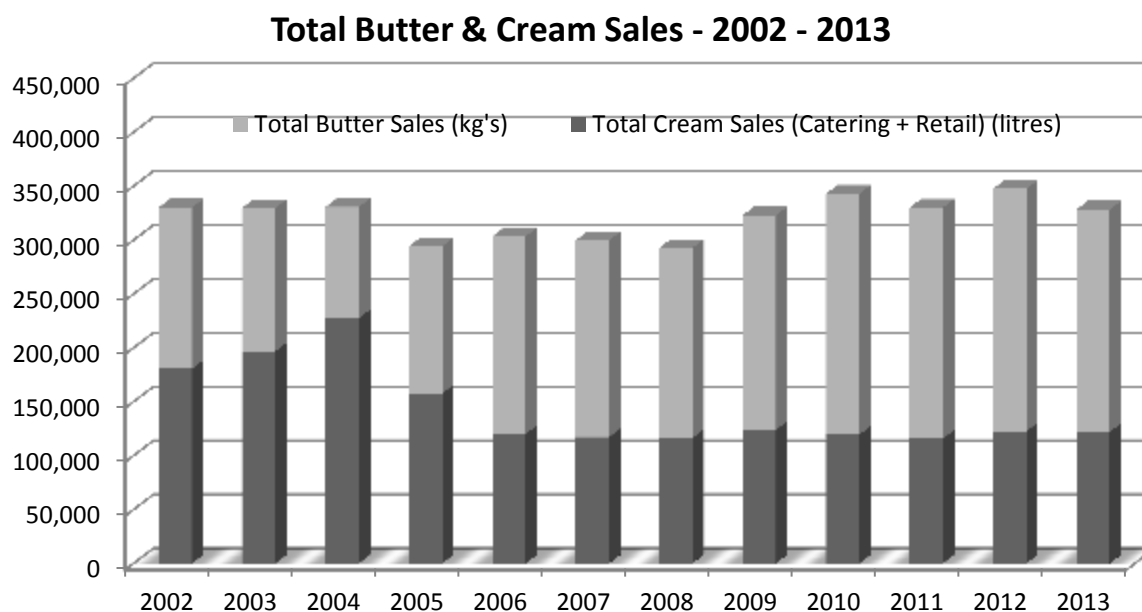
***The Review Group concluded that:-***

- 4:** The Guernsey Farmers' Association must take responsibility for, and play an active role in, guiding, coordinating and encouraging farms to adjust calving patterns to sustain autumn and winter production to remove the risk of undersupply in winter and early spring.

Guernsey Dairy Products other than Milk

66. The Dairy produces a small range of products made from excess cream and milk that is not required for the production of (liquid) milk. These are butter, cream, ice cream, cheddar cheese, and a speciality soft cheese ("Frie d'Or").
67. These are well regarded award winning dairy products but, with the exception of butter, contribute little to the Dairy's bottom line. They are hampered by the high raw material price paid to farmers, high distribution costs, and intense competition in shops from imported brands that are often on price promotion.
68. The Dairy created a Trade Counter in 2003 to give commercial customers access to catering butter and catering cream purchased in bulk. These purchases attracted a useful price discount and allowed the Dairy to increase sales of these products so they made a contribution to the business rather than a loss, as had been the case.
69. In addition, and largely due to the specialist cold chain handling required, Guernsey Dairy Ice Cream can be purchased by any suitably equipped commercial customer.
70. Guernsey Dairy's milk sales contribute over 80% of its turnover and most of its operating surplus, but sales of the Dairy's other products are still important to its overall profitability. With the exception of the exports of salted butter to the UK (and to a lesser extent cream sales locally), these other products make little financial contribution. Avoiding loss-making sales is a key focus.

71. Butter exports have been financially successful for a number of years and the Dairy is able to channel approximately 25% of its butter production through this route and still supply both its retail and catering customers in Guernsey.



72. In view of the relative profitability of cream and butter sales, the Review Group agreed that the Dairy should, in the future and in collaboration with farmers, investigate seriously the possibility and potential value of differential producer pricing of raw milk taking into account such constituents as butter fat.
73. The Dairy could gain from a wider range of trade customers having direct access to purchase other dairy products, a situation approved by States decision in 2010, but which the Dairy has chosen not to implement in practice, in view of uncertainties surrounding the direction of policy with regard to the dairy industry and the Dairy.
74. UHT milk is another potential product for the Dairy and the Review Group heard a number of calls for local UHT milk to be available. Evidence and comment received during consultation suggests that the market for UHT could be between 5 and 8% of total milk sales.
75. The Dairy advised that the capital cost to set up a UHT plant is too high to make it a viable venture and the only possible approach, which is under investigation at present, would seem to be joint working with the Jersey Dairy which already has the necessary equipment. The 2011 review supported this approach and the present Review Group agrees with that finding.



***The Review Group concluded that:-***

- 5:** The Dairy should dispense with the Trade Counter as this was a limited approach to bulk sales of catering butter and cream. It should move swiftly to a situation where any commercial customer wishing to purchase any of its manufactured products (cream, butter, cheese etc.) is free to do so. The Dairy may specify any bulk purchase discounts it believes are commercially justified for these products. (Milk would be covered by other arrangements. See page 32 et seq.)
- 6:** Bearing in mind the States' resolution in 2008 that gave distributors some limited and temporary exclusivity over sales of milk and retail sales of products on to doorsteps for a period until 31<sup>st</sup> December 2015, these arrangements should start from 1<sup>st</sup> January 2016.
- 7:** The Dairy should pursue a link with Jersey Dairy for the manufacture of a Channel Island UHT milk product.
- 8:** The Dairy should work with farmers to investigate the differential pricing of raw milk to reflect the value of, for example, higher butter fat content.

**The Structure and Governance of the Dairy**

- 76. The Review Group considers that it is time to increase the Dairy's independence to operate in a commercial manner and be able to drive forward the modernisation of dairy facilities and the lowering of costs.
- 77. In view of the strategic importance of the dairy industry and continuing States' support, as well as the pivotal and crucial role of the Guernsey Dairy, the Review Group considers that the Dairy should remain within the supporting framework of States' ownership to ensure an appropriate level of (light touch) oversight and accountability from the Commerce and Employment Department on behalf of the Island.
- 78. This new, more independent, Dairy must have far closer links, commitment, and involvement with dairy farmers to ensure the right level of year round milk supply, to establish fair pricing, and to jointly plan the future direction of the industry for the good of the Island. To achieve this it would be right to give farmers representation on the Board of a Dairy that is more independent of day to day political control.



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*"The farmers support the Dairy's desire to have more commercial freedom. We think it could lead to efficiency savings that could help improve returns.*

*Guernsey Farmers' Association Submission to the Review Group*

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**The Review Group concluded that:-**

- 9:** The Guernsey Dairy should stay in overall States' control, but a governance structure should be put in place that allows it greater independence to act in a commercial manner for the good of the Island and the dairy industry, but largely freed from the constraints of political and States control.
- 10:** Farmers should have a permanent place on the Board of a new Guernsey Dairy.
- 11:** If the States agree in principle to the recommendations 9 and 10, careful research should be done by the Department prior to a States Report being brought forward with proposals on the best way to achieve these overall objectives for the future of the Dairy.

## (B) Milk Distributors and Retailers

79. The Review Group was appreciative that representatives of the milk distributors were willing to meet to discuss their element of the industry and broader issues.
80. Four meetings were held and considered future challenges for the industry, although the representatives expressed themselves generally content with the current arrangements.
81. Despite requests both in writing and in consultation meetings, the Review Group was very unhappy that distributors' representatives were not willing to provide general information from their members regarding the split of sales between doorstep and shop sales.

### The Structure of the Distribution System and the Route to Market

82. This topic has caused debate and disagreement over the past decade, whenever anyone has looked at the dairy industry and tried to suggest what changes could create a more sustainable future.
83. Generally, there have been suggestions throughout the consultations that "something" should be done to create a more normal balance between the commercial distribution and retail elements, while still protecting the dairy farming aspects of the industry and acknowledging the role of milk distributors.
84. In the past, proposals seeking to change the status quo regarding distribution and retail pricing, have not been welcomed by the milk distributors (represented by the GMRA = Guernsey Milk Retailers' Association) and, in 2005, there was intense public and political review of proposals to fully liberalise the distribution system.
85. A Scrutiny Review of Department proposals was carried out at the time and, although critical of the Department's communications and future planning for the potential impact of its proposals, the Scrutiny Review fully supported the Department in wanting to keep these matters under review ...

*"It is entirely appropriate for the Department to review the protection and commission currently available to rounds men. It is not the responsibility of government to 'subsidise' private business. It is the responsibility of the Department to review the service provided by the rounds men, the Dairy and dairy farmers to ensure it represents value for money to the States in return for its investment in the industry." Extract from Scrutiny Review Report May 2006 para 8.3.7*

86. Furthermore, the Scrutiny Report observed that ...  
*"... the Department inherited the care of a reasonably stable industry and a set of implemented policies that seemed to be working to good effect. ... the Department inherited an administration of the dairy industry that had been built up over the years based on habit and misconceptions."* Para 2.2.8
87. A consequence of the political turmoil on this topic in the period 2005 to 2007 was that change to the distribution system was curtailed and so it is reasonable to suggest that this analysis probably still holds true to some degree.
88. Currently, the Dairy has a mixed milk and milk products distribution system, which, in large part, but not exclusively, comprises modest sole trader businesses. The exceptions are a small number of businesses that have dispensed with doorstep deliveries and now simply supply a single (large) supermarket outlet, or function as a food supply business to commercial outlets.
89. At the present time, the Guernsey Dairy sells milk to more than 20 milk distributors. There are wide differences in the level of sales to these businesses. The two largest distributors accounting for in excess of 35% of the Dairy's total sales between them. A group of 10 of the smallest distribution businesses account for some 11% of the Dairy's sales in total, while the remaining, larger, distribution businesses purchase over 54% over the Dairy's total sales.
90. A key trend over the past 15 years has been the move away from doorstep deliveries of milk to purchases from large food retailers (and corner shops – which are increasingly based on the corner of garages rather than the small general stores which were a familiar sight in Island lanes thirty or more years ago).
91. The Dairy does not have complete information on the final destination of the products it sells to distributors. The Review Group sought information from the distributors (to be supplied in an anonymous manner to protect business confidentiality) on the sales through doorsteps and shops and was disappointed when distributors' representatives refused to provide this information.
92. The 2011 Independent Industry Review Panel concluded that the trend of increasing shop sales of milk was going to continue and this places the sustainability of the current doorstep delivery model in question. Their estimate of the split of sales was:-

Sales Route	Shop – Doorstep Sales (3 year average 2007 to 2009)
Total Fresh Milk Sales	6.63 million litres
Retail Shop Sales	4.15 million litres (62.5%)
Doorstep and Catering Sales	2.48 million litres (37.5%)

93. The 2011 Independent Review's estimate was that the percentage of sales via shops by volume was over 60% of the total, having increased from 50% in the four years since 2007. Working with information supplied by shops, the Review Group estimates that the percentage of milk sales by volume could now exceed 70%. This figure is given additional backing in the DIIG 2013 residents' survey feedback (See Appendix 3). It is also the case that a further 8 to 10% of total sales, which are not handled by shops, are sales to commercial and catering outlets and not to doorsteps.
94. The reasons for this change will vary from house to house and consumer to consumer, but the increased shelf life of local milk in the last 15 years, the advent of large retail stores capable of handling the display of this refrigerated product, changing lifestyles and the lack of refrigerated delivery arrangements for doorstep must all be contributory factors.
95. There is no reason to suppose, against the background of these trends, that doorstep delivery is as vital to the future of the dairy industry as some would suggest. It is another route to the consumer and for people it is a welcome service, but the extent of doorstep delivery probably has little effect on overall sales.
96. The Review Group is not seeking the end of doorstep distribution, although it has some reservations over its future viability without a changed approach to charging and the provision of a service that suits the variety of customers' needs these days.

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*"The ending of doorstep deliveries by the Jersey Dairy had no effect on total milk sales"*

*Andrew Le Gallais, Chairman of the Jersey Dairy.*

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97. The Review Group was told during its consultations that the system for milk distribution was not as convenient as the larger shops and retail groups would like. Retail groups that currently deal with several distributors said that communication and the routine transactions (ordering and payment) with a collection of suppliers was not the way they preferred to trade. The larger retail stores and groups wanted to avoid multiple transactions and saw the solution to be dealing directly with the Dairy.
98. The current distribution system is the product of over 50 years or more of evolution from a time when unpasteurised milk was delivered daily, or even twice daily, to houses and poured from larger containers into the householder's milk jug left out for the purpose. Central packing had not developed at that time.

99. Consultees told the Review Group that the current system would not survive elsewhere and was vulnerable to changes in the business environment. The Review Group noted that the Dairy reported that it did not fail them as a system to deliver their milk to customers most days of the year. However, the Dairy did have strong concerns about the lack of an effective cool chain once milk left the Dairy's cold stores on its way to doorstep customers and some shop also.
100. The Dairy commented that it would value a greater opportunity to deal directly with the larger retail outlets on product promotions and to specify how their perishable dairy products are handled. The Dairy expressed no interest in running its own delivery service.
101. The Review Group supports the view that a more normal commercial relationship with the retail and distribution chain would help the Dairy in these respects and would be good for sales and, therefore, the industry.

#### Milk Distribution and Licensing

102. The licensing of liquid milk distribution originated during the Occupation and brought central control to the distribution of an important and perishable foodstuff. No other dairy products have ever been covered by licensing.
103. The Review Group noted that 5 years of dispute and disagreement ended on a positive note with the joint drafting, in 2010, of detailed regulations and a simple revised distribution licence, fulfilling a 2007 States' resolution.
104. The Review Group was surprised to learn that, at the specific request of the Guernsey Milk Retailers' Association, the new format licence and regulations had not been issued. This seemed an odd outcome, but in light of the history of this matter it was, perhaps, typical of the lack of clarity that has existed for many years.
105. If, after all the disagreements and the subsequent work to produce a revised licence, distributors found that they could operate perfectly well without one, the importance of this process and the piece of paper must be brought into question. That said, milk distributors continue to maintain that they own these licences and that they have value.
106. In view of the difficult history of this aspect of the review, the Review Group consulted on this matter with the Law Officers. The firm legal advice received by the Review Group was that the arrangements for distribution ("retailers' licences") had never been exclusive, although the States resolved in 2010 to give a temporary period of limited exclusivity over the distribution of milk (and of milk products to doorsteps) until the end of 2015.

107. Further legal advice to the Review Group was that, whatever a distributor may believe, they did not (indeed, could not) buy a licence from anyone<sup>2</sup>. The value in their businesses can only come from the goodwill and contacts taken over at the time the business was bought and their subsequent investment of business skills and service.
108. What a distributor pays for the milk distribution business from its previous owner will always be a commercial transaction. The value of the business will depend on the skill and success of the way the business is run and nothing else.
109. The uncertainty over licences works against the interest of the distributors who, as a result, are not able to plan their future with any clarity. Past disputes on this aspect of the industry seem to hinder a general and forward looking vision being implemented.
110. There was little comment in consultation on the topic of the zoning of milk distribution rounds and the Review Group noted that for some years the matter has been exclusively handled by the GMRA working with distributors as needed. The Dairy and Department have had no information about, or involvement in, milk round zoning for some years.
111. In the future change and restructuring in the distribution sector should still come about, as it does now, through commercial discussions, negotiations, and decisions between distributors and between distributors and their customers.
112. This principle must apply also to “zoning” and there is no current case, or need, for the Department or the Dairy to become involved, except to use its good offices to ensure that supplies to key outlets are maintained in exceptional situations.
113. The Review Group recognises that there may be aspects of the current milk distribution system that can be improved (such as cool chain handling), but it also recognises the investment of money, time and effort that has gone into existing milk distribution businesses.
114. So, whilst it would prefer this aspect of the dairy industry to operate in a straightforward commercial manner, the Review Group considers that a degree of protection is justified for milk distributors at the present time.
115. To bring this about, the Milk Ordinance should be brought up to date, replacing all Milk Retailer’s Licences, whether actually issued or not, with new, Milk Distribution Licences. These new licences will not establish or control milk round zones.

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<sup>2</sup> The Milk (Control)(Guernsey) Ordinance 1958 (as amended) states... 18 (1) Every document issued by or on behalf of the Committee [Department] for the purposes of this Ordinance, is and shall remain, the property of the Committee [Department].

116. In the future, only distributors issued with a Milk Distribution Licence, which will replace the existing and unclear licence arrangements, will be able to purchase milk from the Dairy.
117. The Dairy should be directed that it shall not sell milk directly to shops or take on the function of milk deliveries of any sort.
118. The Dairy will set out the terms and conditions of trading with holders of Milk Distribution Licences in a non-statutory Milk Distribution Agreement.

***The Review Group concluded that:-***

- 12:** The Milk Ordinance should be brought up to date, replacing all Milk Retailers' licences, whether actually issued or not, with non-exclusive Milk Distribution Licences.
- 13:** The Dairy should only supply milk to licensed milk distributors and should not deal directly with commercial outlets such as shops unless, in exceptional circumstances, this is unavoidable on a temporary basis to ensure continuity of supply.
- 14:** There is no case, or need, for the Department or the Dairy to become involved in matters of the zoning of milk rounds.
- 15:** These changed arrangements should come into force as soon as the Milk Ordinance can be revised, hopefully, during 2015.

Setting the Price of Milk

119. At the present time the Department sets the price paid to dairy farmers for raw milk (= the Producer Price), the price the Dairy sells milk to distributors (= the Gate Price), and the retail price. The retail price is set by Order using powers in the Milk Ordinance.
120. Since 2007, and following the States consideration of a comprehensive report on dairy farming, the Department received recommendations from the Milk Price Review Panel (=MPRP) on these prices. The Department is committed to accept the recommendations of the MPRP unless it considers there are exceptional circumstances that suggest it should set prices other than those proposed.
121. The MPRP has three members representing a range of relevant experience, but each member is independent of the local dairy industry and the Department. The MPRP has met annually since 2007 and asks the key stakeholders in the industry for information about their costs of operation that would influence the prices set. The stakeholders consulted are the Guernsey Farmers' Association, The Guernsey Milk Retailers Association and the Guernsey Dairy.

122. To enable a seasonal producer price pattern for Dairy farmers to be set commencing in October each year, the MPRP meets to consider submissions during July and provides the Department with its recommendations in late July. These are considered without delay by the Department and sent to stakeholders for comment. The Department considers stakeholder feedback and makes its decision in late August to allow one month's notice of any price changes.
123. The Review Group heard a range of views on the operation of the MPRP during the consultation, with the most strongly negative views coming from the GMRA who considered that it had not sufficiently taken into account the business needs of the distribution sector. On the other hand, the MPRP expressed the view that they received very little factual information from the distribution sector on which to base consideration of the retail margin (i.e. the difference between the the Dairy Gate Price and the fixed Retail Price).
124. The Review Group learned that the Milk Price Review Panel had offered, in 2011, to facilitate a totally confidential costs survey to establish more information on the viability of milk distribution. In the event, only two or three distributors had indicated their willingness to take part and the survey was cancelled as any information would have been unrepresentative of the sector.
125. This was an opportunity for the distribution sector to engage productively with the body charged by the Department to advise on price regulation. The Review Group was surprised and disappointed to see it had not been taken up.
126. The milk distributors made no attempt to provide supporting information during consultations and so the Review Group is grateful to the work of the 2011 Independent Review for their analysis behind this aspect of the dairy industry.
127. The 2011 Independent Review of the Dairy Industry (Billet XIX Vol 2 2011) estimated that, on the basis of the set retail margin and the division of this margin between shops and distributors, sales on the doorstep were barely profitable, whereas supplies to shops were relatively more profitable particularly because shop deliveries are bulk deliveries of milk by the crateful. This is in contrast to the doorstep deliveries of small numbers of litre packs.
128. Whilst there will have been some small price and cost movements in the intervening period, the consultation feedback from the GMRA was that this was still the case during consultation meetings in 2013.
129. The GMRA made the point in consultation that this situation means that their sales to retail and commercial outlets are considered to be essential in maintaining the viability of their businesses and, in effect, cross-subsidised doorstep deliveries. The Review Group also noted that the difference in profitability had prompted some distributors to drop doorstep deliveries completely and solely supply single large retail outlets.



130. Taking the stated (but unverified) GMRA position that doorstep deliveries are not viable, the obvious solution is to charge more for the home delivery service provided. A small charge per litre of this nature could change the viability of doorstep deliveries. Under the current milk legislation distributors are free to make such a delivery charge to doorstep customers as they wish.
131. Distributors reported that they were often hampered from charging a realistic sum for the provision of a doorstep delivery because of the perception that the retail price cannot be varied. That said, it appears that some distributors do make additional charges – often termed administration charges – although this is not consistent throughout the GMRA membership. Distributors’ representatives reported that attempts to impose such charges on existing customers could sometimes result in the loss of that customer from the doorstep round.
132. Milk distributors did not favour the removal of retail price control as they saw it as a key restraint on the pricing strategies of shops. They feared lowered shop prices could undermine doorstep sales, an outcome which distributors consider would reduce total milk sales and thus be damaging to the Dairy and the industry.
133. The evidence from sales data shows the trend to shop sales and a decline in doorstep sales to be as strong as ever. The trend has been dramatic in the last decade.
134. However, with no obvious drop in total milk sales from this trend, there is no reason to think that the regulation of retail price helps anyone and, least of all, the consumer. It does not appear to protect doorstep sales from competition from shops and so the net effect of controlling the shops retail price is to disadvantage the vast majority of the Guernsey Dairy’s customers from choice and price competition.
135. The current fixed retail price of milk is a mixed blessing for distributors as, while it prevents large shop retailers from undercutting the doorstep price by discounting, at the same time it defines the retail margin that they have to work with and re-enforces an expectation regarding the retail price. That is, it is fixed irrespective of where you buy it and how it gets into your ‘fridge.
136. Representatives of major food retailers all strongly supported the continued exclusion of imported milk and stated that they could see advantages from the removal of retail price control, allowing them to price competitively. Most expressed a preference for closer dealings with the Dairy.
137. In the view of the Review Group, the removal of controls on the retail price of milk will put sales on a more normal and commercial footing, without any obvious risk to the future of total milk sales and the industry.

138. A freed retail price for milk should stimulate competitive pricing by retailers, and the beneficiary will be loyal Island consumers. With no retail price to set, the work of the Milk Price Review Panel can be eliminated, making budgetary savings.
139. The Review Group considers that the farmers' Producer Price should be jointly agreed by the Dairy and the GFA on the basis of detailed and open access to performance and cost information. Should there be significant disagreement on these prices, then the matter can be referred to the Commerce and Employment Department for a final decision.
140. To protect the Guernsey Dairy and farmers it is important to have a non-negotiable Dairy Gate Price for milk, particularly as total sales are static and it is not expected that price promotions would increase sales. This, with strong control over milk importation, will bring clarity and certainty to the market place and will be a key support for the dairy industry.
141. With high production costs and few economies of scale in the industry, the price of a litre of locally produced milk is unlikely ever to be the same as mass produced and processed milk elsewhere. At the present time it remains comparable with other Channel Island breed milk and online reviews of prices in major UK supermarkets consistently shows that the current retail price (111p per litre) for local milk is comparable with Channel Island brand milk sold in the UK.
142. Paying the Guernsey price ensures not only an excellent milk product, but fundamentally supports all the benefits the Island gains from the dairy industry.

***The Review Group concluded that:-***

- 16:** The Retail Price of milk should no longer be controlled.
- 17:** The farmer's Producer Price for raw milk should be set by the Dairy in collaboration with farmers.
- 18:** The Dairy's Gate Price should be set by the Dairy and must be non-negotiable.
- 19:** With no retail price to set and a new arrangement for setting the producer price, the work of the Milk Price Review Panel can stop.

**(C) Dairy Farmers**Farm Production and Quotas

143. As described earlier, sufficient year round production of milk on Island dairy farms is a crucial aspect of the successful operation of the Dairy and its joint task with dairy farmers to fully supply the local requirements for fresh milk.
144. Faced with over production in the late 1990s, the system of milk quotas was introduced to control production. Ever since its introduction in 2001, alongside Dairy Farm Management Contracts, the milk quota system has been a central and controlling part of dairy farming and production management.
145. The basis of the dairy farm quotas is that they specify the maximum number of litres of milk that a farmer can supply to the Dairy each month and for which they are paid the Producer “A” Price. Production that is over quota receives “B” price. This has been an effective measure controlling excessive production since 2001.
146. Responding to the industry and the views of farmers and the Dairy, the basic quota system has been modified over the past 12 years. Arrangements exist so that, for example, a farm can still receive the “A” price for over-quota production if these extra litres compensate for underproduction on another farm. Measures have also been taken to encourage more winter production.
147. The Department allocates quotas to farms each year within their Dairy Farm Management Contracts but, to ensure business certainty for farms, it is rare for there to be any changes in a farm’s quota allocation unless the farm has dramatically cut back its herd size. When a farmer retires or ceases production (and this may involve the sale or leasing of a farm) the quota litres are redistributed to other farms.
148. All such transfers of quota are based on a review by the Milk Supply Panel which meets, as needed, to consider applications from farms seeking to take up the available quota. The Panel assesses the ability of the applicant farm to produce the extra milk and also checks to see if it has suitable farm facilities for the larger herd size. The Panel makes its final recommendation to the Commerce and Employment Department. This system has worked well since 2001.
149. The Guernsey Farmers’ Association confirmed to the Review Group that, although the quota system has positive effects, there are some inherently negative features to the operation of a quota system.

- (i) New farms are unable to enter the industry without a quota allocation, which can only be obtained when another farm leaves the industry. There is no guarantee that the Milk Supply Panel will allocate the required litres to any particular farm as these re-allocations are often 2 or 3 times over-subscribed.
- (ii) An active farm will be unlikely to risk expanding its herd and invest in new facilities to grow its business if it does not have sufficient milk quota.

150. In other words, the quota system is a good system to control production, but not to stimulate business development. The Review Group considers that development of farm businesses is precisely what will be needed to secure the industry's future.
151. This situation concerned the Review Group as, despite the past success of the system and acceptability to farmers, milk quotas do not appear to be the best way forward now, particularly as the industry is no longer dealing with an oversupply of milk and farms will need to expand and invest to maintain production levels.
152. Despite its positive qualities, the milk quota system seems to inhibit business development and creates a largely unnecessary administrative burden. In the light of the falling number of farms, it was considered that a change of policy is needed at this time.

***The Review Group concluded that:-***

- 20:** An early task for the Dairy and farmers must be to establish the future form of milk supply contracts and amendment of the current system of milk quotas for introduction in 2015.
- 21:** It would be valuable for the farmers to work closely with the Dairy to establish more commercially minded **Milk Supply Agreements** that match total farm milk supply to the needs of the market.

Dairy Farm Management Contracts

153. Dairy Farm Management Contracts were first introduced in 2001 with the following objectives:-
- Improving countryside management
  - Significantly reducing water pollution from dairy farming operations
  - Establishing and maintaining high animal welfare standards on dairy farms
  - Halting the intensification of dairy farming
  - Providing support to the Guernsey cattle breed improvement programme
  - Providing an alternative income stream for dairy farms, and thus reducing the cost of raw milk to the Dairy and restoring its operating surplus
  - Bringing about a reduction in the retail price of milk

154. Fuller details of the background to these contracts has been set out in past Billets D'Etat (e.g. Section 4 of Billet XIII April 2007) and will not be repeated in this report other than to summarise that contracts specify the environmental, production intensity, and animal welfare requirements placed on all dairy farmers and for which a contract payment is made to farms as long as they adhere to the provisions set out in the contract (See Appendix 4).
155. Dairy Farm Management Contracts provoked little or no comment in the consultation period, other than that they are well understood and that monitoring shows they are achieving their objectives as set out in 2001.
156. The Review Group agreed that Dairy Farm Management Contracts remain a useful and proven mechanism to ensure the uniform application of high standards of farm management and environmental protection.

#### Dairy Farm Management Contract Payments

157. The Review Group focused in detail on one key aspect of Dairy Farm Contracts, namely, the level and essentiality of Dairy Farm Management Payments and the funding drawn from the taxpayer each year under this system.
158. Contract payments to farmers for adherence to the provisions of the Dairy Farm Management Contract are made at the rate of 25 pence per litre for milk delivered to the Dairy within a farm's monthly quota allowance. This figure is unchanged since 2001 and is drawn from the Department's total annual revenue budget for these contract payments of £2.025 million.
159. As contract payments create an alternative income stream for farmers, the Dairy has been able to pay less for the raw milk it receives. This allowed the Dairy to dramatically cut its Gate Price, which resulted in a lowered retail price of milk.
160. One reason for the drive to reduce the retail price of milk in 2001 was the fear that high retail prices could stimulate importation of lower priced milk, so unravelling the market for local milk and undermining the local dairy industry. Whilst this would not destroy the dairy industry in total, it would probably cause a significant restructuring, with a sharp decline in the number of farms, cattle, and hence the availability of locally produced milk.
161. Before the farm contract system was introduced in 2001, the retail price of milk was 94 pence per litre. Once the farm contract system came into force in 2001 this dropped to 66 pence per litre, but now stands at 111 pence. With the current industry structure, but without the Dairy Farm Contract Payment system, the retail price of milk would be significantly higher than it is now.

162. Dairy Farm Management Contracts and payments provide support for dairy farming and give a mechanism to ensure that wider benefits for the Island are obtained.
163. However, expenditure by the States has to be carefully considered to ensure it is both necessary and represents good value for money. In the case of the annual support for dairy farming, the Review Group critically reviewed the scale of Dairy Farm Contract Payments in the light of other funding decisions of the States.
164. Bearing in mind that one purpose of the Dairy Farm Contract payments system was to lower retail prices and make milk importation less attractive, the Review Group was pleased to be advised that the Island's milk legislation can be redrafted to provide better control over imports. This reduces the risk of importation and that a challenge to the milk import ban would be successful.
165. The Review Group is pleased to record that large store retailers, without exception, stated in consultation that they wished to support fully the sale of locally produced milk over imported milk even though this removes some commercial opportunities from them.
166. In the light of these developments, the Review Group considers that, the States' annual support funding into the dairy industry could be reduced. This reduction should be done stepwise to allow time – a 5 year transition period is proposed – for the industry (the Dairy and dairy farmers) to adjust to the changed financial balance that will result.
167. As this support funding represents an income stream for dairy farms, reductions in Dairy Farm Contract Payments will need to be considered alongside Producer Prices paid by the Dairy. While this may create an upward pressure on the Gate Price of milk, this can be mitigated by increases in operating efficiency at the Dairy, increased production efficiency on the reduced number of larger farms anticipated in the future, and by competitive retail milk pricing.

#### Milk Quotas and Contract Payments

168. Since 2001, quotas have been the link between the production system and Dairy Farm Management Contract payments. The £2.025 million annual fund is paid at the rate of 25p per litre of milk delivered to the Dairy within a farm's quota.
169. As it is envisaged that milk quota arrangements will be amended or suspended in future, in favour of flexible and commercial Milk Supply Agreements between farmers and the Dairy, there are practical reasons for contract payments to be decoupled from quota litres to some other more suitable payment mechanism.

170. As a key outcome of States intervention in the dairy industry is to ensure its future sustainability, support for extensive farming, alongside the protection and advancement of the local cattle breed, the Review Group considers that support payments in the future should be based on these factors.
171. Dairy Farm Contract Payment arrangements need to be altered and this should be put in place by the Department for the 2015 contract year, following consultation with the dairy farmers. They should be based on factors such as the land managed for recognised environmental and wildlife purposes, the number of cows in milk (and producing more than a set minimum level of production per lactation) and participation in the Guernsey cattle breed development programme.

***The Review Group concluded that:-***

- 22:** Dairy Farm Management Contracts should continue, as they are the key to the delivery of some of the Island's wider strategic objectives for the environment through a relatively low intensity farm management system.
- 23:** Future contracts must maintain the current animal welfare and breed improvement requirements, the limits on stocking density, and the need to have a biodiversity action plan in place for the land farmed.
- 24:** The fund for contract payments should be cut over a five year period, reducing to an annual commitment of £1 million by 2019. A further review should be done at the end of this period to assess the need and level for such support beyond that date.
- 25:** Consideration must be given to the mechanism for contract payments if quota is suspended, as the Review Group believe it should be.

**(D) Legislation Affecting the Dairy Industry**

172. The dairy industry is regulated by numerous pieces of legislation, controlling matters ranging from animal identification to zoonoses. The effect of most of these is to control the industry for an external purpose; for example to ensure food hygiene or in support of water pollution control.
173. However, there are two areas where legislative controls exist for the industry in support of its aims and aspirations. These are:-
- (a) Control over the importation of cattle and bovine semen and the use of non-Guernsey genetics in breeding with the aim of protecting and improving the Guernsey Cattle Breed, and
  - (b) Regulation of the operation of the Guernsey Dairy, payments to farms, the retail price of milk and milk retailing.

**Protection and Improvement of the Guernsey Cattle Breed.**

174. The Animals and Animal Products (Import and Export) Ordinance, 1952 (as amended) controls the importation of cattle (other than from Alderney and Sark) and the Bovine Semen, Artificial Insemination and Embryo Transplantation Ordinances 1957 to 2001 allow the Department to control the importation of bovine semen. These are seen as essential tools to protect the local cattle breed and enable a controlled and successful breed development programme.
175. Banning the import of live cattle and giving control over bovine semen imports to the Commerce and Employment Department, allows the protection and the steady improvement of the breed as a distinctive and commercial milk producer, despite its current small numbers worldwide. The objective is not to pursue production increases alone because of the stress that can place on cows. (See Section 2.1)
176. Legislation has allowed the importation of semen of selected beef breeds to be managed to ensure that there is no risk of the introduction of non-Guernsey breeds into the local herds, whilst allowing the production of good first generation cross-bred beef animals should farmers wish to diversify their businesses in this way.
177. The maintenance of these controls is supported by all those who took part in the consultation process. They allow the States as a responsible authority to partner the industry with an agreed approach for the operation of a bovine artificial insemination service.

***The Review Group concluded that:-***

- 26:** The legislative controls protecting the Guernsey Cattle Breed should remain in place as they are essential for the future of the breed.



Control of the Dairy, Milk processing, and Milk Retailing

178. The Milk Law<sup>3</sup> and the Milk Ordinance<sup>4</sup> continue to have a significant impact on the operation of the Dairy and its relationship with the distribution system and the retailing of liquid milk.

179. The substantive controls are set out in the Ordinance, which covers the following aspects of the operation of the Dairy:-

- Dairy farms to supply all milk produced to the Dairy
- A balancing duty on the Dairy to accept this milk
- Classification of the milk on the basis of quality testing
- Raw milk pricing
- Retail pricing
- Delivery charges (which are permitted)
- Control of who may distribute and retail milk
- Control over the sale of imported milk
- Rules regarding the issuing of, and conditions in, licences to retail milk
- Specific provisions for the transfer of licences
- Milk packaging
- Control of supplies of milk to manufacturers
- Control of contamination of milk
- Powers to require information on all aspects of distribution and retailing to be made available on request
- Power to enter and inspect premises in relation to the storage and handling of milk
- Penalties for breaches of the legislation

180. It was frequently commented on in consultation that this legislation is out of date. Some consultees expressed support for greater relaxation in the statutory controls than others. However, all recognised that this is an area that must be addressed and the patched up nature of the current legislation should be resolved to give greater clarity for the industry in the future.

<sup>3</sup> The Milk and Milk Products (Guernsey) Law 1955

<sup>4</sup> The Milk (Control) (Guernsey) Ordinance 1958 as amended

181. The question of the control of milk importation is central to a number of policies for the future of the Dairy industry. The industry would be vulnerable to a serious loss of sales if uncontrolled importing were to gain a foothold. In that situation, this would undermine the finances of the Dairy and of dairy farming.
182. Although the legislation sets out penalties for offences, they were felt to not be strong enough to act as an effective deterrent against the illegal importation of milk.
183. The Review Group considers that there is a strategic need and a high priority for the industry to be protected by up to date and robust legislation, in particular ensuring that uncontrolled milk importation cannot occur.
184. The Review Group considers that the States should only regulate where absolutely necessary and should dispense with anomalies and historical anachronisms in the legislation.
185. It is vital to overhaul the Milk Ordinance without delay, striking a balance between protection of key aspects of the industry from imports and freeing-up arrangements so that farmers, the Dairy and customers can gain from a more commercially operating market for locally produced milk.

***The Review Group concluded that:-***

- 27:** Useful powers in the Milk Ordinance should be strengthened and brought up to date, providing clear control over the importation of milk and modernising out of date elements in this legislation.
- 28:** A new Milk Ordinance should be drafted without delay and it should be brought into force as soon as possible.

**(E) The Changing Industry and New Entrants**

186. At the time of writing the dairy industry is made up of 15 farms; the smallest commercial milking herd has 35 cows and the largest has 175. This is a dramatic change to the situation in the 1950s when there were over 400 far smaller farms.
187. The island cattle population in the 1950s was in the region of 2,000 animals and the average herd size was just 5 cows. Over the years the trend has been towards fewer, but larger, farms and the average herd is now 90 cows.
188. The business risks associated with small turnover businesses and long hours of work have been behind the decision of mainly part-time and small herd dairy farmers to retire. The Review consultation discussions gave the clear message that this trend will continue further, with farms consolidating and growing as more farmers decide to retire.
189. In the light of falling farm numbers, the suggestion has been put forward that the Department and the States should try and reverse this trend and encourage a surge of new entrants to the industry. However, the result of such interference could well be to preserve smaller, less profitable farms and hamper the natural expansion and success of others.
190. Considering this situation strategically, an industry of 10 farms averaging 150 milking cows may be a far better future for the Island in the long term, giving greater resilience and greater opportunity for viable dairy farms to operate and make the long term investment that will be needed to give the industry greater sustainability in the future.
191. The Review Group was told that the biggest barrier to farmers entering the industry is the capital expense of stock, buildings and equipment. One way for new farmers to take over existing farms is by having a share-farming agreement, which is a favoured way into farming in New Zealand.
192. Another way into the industry for a new entrant is an equity contract arrangement whereby the new entrant may purchase the cows and maybe some machinery, but rent the buildings and land on a 10 year (for example) fixed term lease, which gives them some security. This allows the new entrant to prove his or herself and also to build up some capital before, perhaps, renewing the contract, purchasing the farm, or moving to another farm in due course.
193. In a recent case, a leading dairy farm was taken over by an incoming farmer in such an equity contract arrangement and without financial involvement from the States. This appears to be a good way forward for the creation of new farm businesses, when simple family inheritance is not an option.

194. The benefit of both of these arrangements is that the farmer who has built up the business is able to retain some interest in it during retirement, and obtain an income, whilst the new entrant is able to take on a farm that he or she would not have been able to afford if it had been sold. This also works quite well where a son or daughter wishes to take over a family business and there are a number of other siblings to consider.

***The Review Group concluded that:-***

- 29:** In the future, farms should be of a size that is suited to generating a reliable operating profit and thus making the industry more sustainable and creating farm businesses that will be commercially attractive to new entrants.

**(F) Loans for Farm Development**

195. In the past special farm loans were available to a new entrant/young farmer, but the States' requirement that there is full security for the money loaned, meant that it was the family of the new entrant who must guarantee the loan and take out a bond to that effect.
196. Not all young farmers are going to make a success of farming and the States could easily end up in a very difficult and costly financial position if the farmer defaulted on the loan.
197. The farm loan scheme, that was in force over the past 25 years or more, permitted the purchase of land, buildings and bolted down machinery (like a milking parlour), but not the purchase of machinery such as tractors (which are often leased).
198. Whilst the purchase of livestock and even working capital was originally permitted in the farm loans scheme, these items were disallowed in the very early days of the scheme. Farm loans were given throughout the 1980s and 1990s for land purchase and the development of farm buildings.
199. More recently, as land values have increased, there has been no interest on the part of farmers in the purchase of land and most loans since 2000 have been made for buildings, under-cover cattle yards and slurry stores (which were grant aided between 2000 and 2003).
200. In recent years there has been little call for farm loans as the interest rates available on bank loans have been so low.

201. At the current time there is no longer a farm loans fund as the balance of some £700,000 was transferred to the fund created to finance the replacement slaughterhouse at Longue Hougue.
202. In the view of the Review Group, the States should not interfere in the process of the establishment of new farms or new entrants to the dairy industry. Also it would, ideally, not become involved financially in such aspects of dairy farming.
203. However, despite the Review Group's general concern about States' financial involvement in this aspect of the development of the dairy industry, it considered that the current difficulties being experienced by businesses in raising funding suggest that the case for agricultural (and horticultural) farm development loans to assist new entrants as well as those seeking to expand their herds and facilities should be re-examined. This re-examination should be part of a wider consideration of the funding of business development in the economy.

***The Review Group concluded that:-***

- 30:** The Department should evaluate the benefit of financial assistance to existing farm businesses and new entrants, perhaps as part of a wider business development scheme for the Island.

**(G) Land and Planning**

204. Dairy farming is the single most extensive use of open land in the Island and has been important in creating and carefully maintaining the green and traditional landscape that is the backdrop to Islanders' lives and which creates a lasting and positive impression that is retained by those who visit us in Guernsey.



205. Despite the impact of dairy farming on the countryside being so great, of the over 8,000 vergées of land looked after by dairy farms, less than 10% is farmer owned. Land which is tenanted is often on short (12 month) gentlemen's agreements and only occasionally with a written lease. Farmers have little security of tenure and the Department's own annual mapping of land used for dairy farming shows how land comes in and out of farming as owners' wishes change.
206. Another feature of farmed land is that, in most cases, the land used by a farm is generally quite scattered in small groups of fields or even single fields. This makes for inefficient farming and it can be the work of a whole career to try and obtain permission to farm sufficient land and to consolidate it in as few blocks as possible.
207. There is a lot of wealth and many people in the Island and this leads to pressure for open land to be put to other uses including its incorporation into domestic curtilage and permanent recreation facilities (such as horse stabling). There is pressure for redundant vinery sites to be used for more economically rewarding activities rather than being restored to open and agricultural land.
208. The Review heard a general call from its consultation discussions that the open land that is zoned for agricultural use should be protected strongly to ensure it can be made available for farmers to rent. There was also support for the restoration of horticultural land to its former open state for use in agriculture. While not all such sites are suitable for restoration, many are on good or potentially good farm land and are linked to existing farmed fields. They could, if restored properly and returned to farming use, create vital links to connect fields or groups of fields.

209. The Review Group believes that there will be some, but probably limited, instances when old vineries could be put to other uses. This is a planning matter and decisions must be based on clear and objective criteria. The Department has made representations to the Environment Department stating that it considers the retention of contiguous areas of agricultural land to be of prime importance. The Review Group also believes that there could be value in introducing an incentive, using the TRP system, such that land zoned as agricultural, which is not used for agricultural purposes, could attract a higher charge than land in active use for farming.

*"Land zoned "agricultural" is used in higher value use classes when grazed by horses or manicured as a lawn with tree planting. Some fields are not efficient to operate if they are small or isolated, then they are no great loss, but there are examples of prime farm land used for amenity and the continuation of this is a threat to farm businesses" - GFA submission to the Review.*

210. The greater the area of land available and the stronger the controls to stop it being used for non-farming activities, the better it will be for the future of viable dairy farming, which is what the Review Group's vision seeks to encourage.
211. In this context the Review Group also is concerned that modern farm buildings should not become diverted to non-farming uses, as their availability for uses such as storage, livestock housing, milking parlours, and farm equipment storage will remain key to the operation of efficient farm units in the future.
212. In the future, factors such as the rising cost of fuel, climate change reducing grain harvests, and the increasing world-wide consumption of meat driving demand for cattle feed, can all be anticipated to result in the prices of imported cattle feed rising in the coming years. This is expected to persuade more dairy farmers to grow grain and root crops to supplement cattle rations. This, together with strict local pollution reduction targets, will require greater extensification and more land for farming and dairy farming in the coming years, rather than less.
213. All open land has a value for agriculture, even that of moderate or lower quality which is well suited to the production of grass, a key element of the feeding regime of dairy cattle in preference to the importation of high cost feed.
214. The Review Group believes strongly that there are real opportunities for some dairy farms to diversify to maintain their profitability. While such activities as farm shops and visitor focused attractions may not fit the business models of most dairy farms they may be a key development for some. The Island has a wide range of excellent products and produce that locals and visitors want to see and buy as is evidenced by the various farmers' markets that run all year round.

215. Farm shops could not only help the farm's income, but will also be an added boost and interest for visitors to the Island. Such developments should be carefully controlled and not create a "back-door" to permanent non-farming uses of farm facilities.



***The Review Group concluded that:-***

- 31:** Agricultural and open land should continue to be protected and left undeveloped, leaving a strategic "land bank" for the future of food production and farming. Using the TRP system to create an incentive could have a positive impact on the availability of land for farming.
- 32:** Suitable modern farm buildings should be protected for truly agricultural purposes and not given a change of use. Farmers should be able to develop the facilities needed to support the operation of their farms.
- 33:** Some flexibility in planning should exist to assist farmers who want to develop ancillary uses linked to the operation of a working farm, such as farm shops, to sell the farm's produce and so encourage the buying of locally produced food and create interest for visitors and locals.

**(H) States of Guernsey Farm Services**

216. The Department's Farm Services Section provides two key services that exist to support the improvement of the Guernsey cattle breed. These are the Milk Recording Service and the Artificial Insemination Service, for which the section charges on a 50% full cost recovery basis.
217. The Section manages the cattle herd registration database and supports the work of the States Veterinary Officer on such activities as the annual herd health testing programme. The staff are a small team working anti-social hours and split shifts.
218. The consultation discussions revealed a unanimous view that the section provides an excellent service that was delivered in a timely and efficient way.



The operational cost and staffing statistics for Farm Services in recent years are:- .

	2008	2009	2010	2011	2012	2013	2014 (est)
<b>Operating cost (£)</b>	190,350	193,145	179,847	188,736	187,350	189,910	198,960
<b>Charges % recovery</b>	30%	39%	49%	45%	50%	50%	50%
<b>Staff (FTE)</b>	5.0	5.0	5.5	4.62	4.62	4.62	<4.50

*NB In 2004 Farm Services employed 7 FTE (Full time equivalent) staff. Costs are not inflation adjusted.*

#### Milk Recording Service

219. Milk recording involves monthly visits to farms to coincide with milking. Milk samples are taken for laboratory analysis of the quality. The amount of milk produced by each cow in the herd is recorded.
220. The data collected is entered into computers and transmitted to a specialist UK cattle statistics handling bureau for analysis. The data on cow performance feeds into the breed improvement scheme and also provides farmers with management information on the performance of their herd. This is an area where Farm Services collaborates closely with the local breed society.

#### Artificial Insemination ("AI") Service

221. There are various aspects to the AI work of the section, but essentially it provides a 365 day per year insemination service. Farmers identify cows that are ready for insemination and call for a visit to be made with as little as a few hours' notice.
222. The section also manages the AI Centre (in the lanes behind Saumarez Park) where selected young calves are reared from a few days of age. The section maintains an AI Laboratory on site and stores semen (refrigerated in liquid nitrogen) for which it runs the Island's only liquid Nitrogen production plant.

#### Slaughterhouse

223. The new Island slaughterhouse at Longue Hougue is now operational and the Review Group did not consider that it should be looked at closely in this report.
224. The new facility has already successfully opened up the possibility for cattle of all ages to enter the food chain, ending some 17 years of restrictions that resulted from the BSE problems of the 1990s. The savings in support payments that were introduced at the time (and which include payment of the full cost of incineration of carcass) will build over the next 12 to 14 years and fully fund the replacement slaughterhouse.
225. The slaughterhouse is operated by a contracted third party operator who also runs the cattle incineration service.

Carcass Incinerator

226. The cattle carcass incinerator is a public health requirement that was also a product of the BSE crisis of the 1990s. This facility ensures full hygienic disposal of waste (including waste and “specified risk material” from the slaughterhouse) and animals that cannot enter the human food chain.
227. The work of the Farm Services Section is the key to the Guernsey cattle improvement scheme, as well as the routine herd management on all dairy farms. This is specialist work and no alternative provider has been identified. The slaughterhouse and incinerator are also essential, providing a modern route to market for locally produced meat and the safe disposal of animal waste.
228. The Farm Services Section has clear objectives and adopts best practices, with guidance from the States Veterinary Officer and other authorities. There is a well-established culture of continuous improvement and there is a history of providing low cost solutions that still deliver an adequate service. In its consultation the Review Group heard only overwhelming support for Farm Services and its work.

***The Review Group concluded that:-***

- 33:** Farm Services are a vital and well managed service for the industry.
- 34:** Farm Services represent good value for money and those involved should continue to work closely with the industry and identify further efficiency improvements in the coming years, as they have done in the past.



## PART 3

### Conclusions of the Dairy Industry Review Group



**A Valued Local Industry ... and more**

229. The dairy industry is an asset of great value to the Island, both the industry and the Guernsey cattle breed are a completely authentic and irreplaceable part of the Island's heritage, environment, and Island life.
230. The dairy industry has adapted well to the challenges of the last decade, with farms curtailing production in total to match the Island's overall need for liquid milk. With the number of farms having reduced by a half (from 30 to 15 farms) over this period, individual farms have increased production to replace that lost when farmers have retired.
231. Farms have adapted to the regulation that has come from Dairy Farm Management Contracts, but the greatest challenges are to come if, as anticipated, the number of farms reduces further. The remaining farms will need to expand, investing in vital equipment that will be needed to run larger herds.
232. There will also be a need to ensure that new entrants looking to take over farms, as the current owners retire, are able to do so.
233. While Guernsey Dairy milk and products are well regarded and loyally supported by Islanders, the whole industry will have to address the control of costs to ensure that the consumer does not have to pick up an increasingly large bill to ensure the industry survives.
234. The evidence considered by the Review Group all points to an industry that will need a degree of protection to ensure a ready market exists for its products – principally the current 6.5 million litres<sup>5</sup> of liquid milk sold each year – combined with sufficient relaxation of the regulatory burden to allow positive commercial influences to drive change for the better and help reduce large and partly unnecessary cost on the States.
235. The Dairy is at the heart of the industry. It is well regarded and profitable and must be free to operate efficiently, processing milk produced on local dairy farms.
236. Throughout the process of reviewing the dairy industry, the Review Group has drawn many conclusions from the evidence presented to it and the discussions it was able to have with representatives from within the industry and experienced and knowledgeable observers from the outside.
237. These conclusions are set down throughout Part 2 of this report with the observations and data on which they are based. Drawing these together, the key conclusions of the Review Group are as follows:-

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<sup>5</sup> 3 year average annual sales 2011 – 2013 was 6.474 million litres

**The Guernsey Cattle Breed** (Section 2.1)

- 1: The Guernsey cattle breed is a distinctive local breed the maintenance of which will enhance the available pool of world farm animal genetic resources.
- 2: Support for the breed is in line with policies for the protection of the rarer distinctive breeds in Europe. Protection for dairy farming and the breed by the enabling of a self-sustaining dairy industry on the Island will be a more cost effective approach in the future.
- 3: Protecting the local Guernsey cattle breed is one of the key reasons and justifications for controls over the importation of milk and other breeds to the Island and recognises the change in attitude that now accepts the value of maintaining genetic resources as a legitimate balance to the free market and movement of goods in Europe.

**The Guernsey Dairy** (Section 2.2.A)

- 4: The Guernsey Farmers' Association must take responsibility for, and play an active role in, guiding, coordinating and encouraging farms to adjust calving patterns to sustain autumn and winter production to remove the risk of undersupply in winter and early spring.
- 5: The Dairy should dispense with the Trade Counter as this was a limited approach to bulk sales of catering butter and cream. It should move swiftly to a situation where any commercial customer wishing to purchase any of its manufactured products (cream, butter, cheese etc.) is free to do so. The Dairy may specify any bulk purchase discounts it believes are commercially justified for these products. (Milk would be covered by other arrangements. See page 32 et seq.)
- 6: Bearing in mind the States' resolution in 2008 that gave distributors some limited and temporary exclusivity over sales of milk and retail sales of products on to doorsteps for a period until 31<sup>st</sup> December 2015, these arrangements should start from 1<sup>st</sup> January 2016.
- 7: The Dairy should pursue a link with Jersey Dairy for the manufacture of a Channel Island UHT milk product.
- 8: The Dairy should work with farmers to investigate the differential pricing of raw milk to reflect the value of, for example, higher butter fat content.
- 9: The Guernsey Dairy should stay in overall States' control, but a governance structure should be put in place that allows it greater independence to act in a commercial manner for the good of the Island and the dairy industry, but largely freed from the constraints of political and States control.
- 10: Farmers should have a permanent place on the Board of a new Guernsey Dairy.
- 11: If the States agree in principle to the recommendations 9 and 10, careful research should be done by the Department prior to a States Report being brought forward with proposals on the best way to achieve these overall objectives for the future of the Dairy.

### **Milk Distributors and Retailers** (Section 2.2.B)

- 12:** The Milk Ordinance should be brought up to date, replacing all licences, whether actually issued or not, with non- exclusive Milk Distribution Licences.
- 13:** The Dairy should only supply milk to licensed milk distributors and should not deal directly with commercial outlets such as shops unless, in exceptional circumstances, this is unavoidable on a temporary basis to ensure continuity of supply.
- 14:** There is no case, or need, for the Department or the Dairy to become involved in matters of the zoning of milk rounds.
- 15:** These changed arrangements should come into force as soon as the Milk Ordinance can be revised, hopefully, during 2015.
- 16:** The Retail Price of milk should no longer be controlled.
- 17:** The farmer's Producer Price for raw milk should be set by the Dairy in collaboration with farmers.
- 18:** The Dairy's Gate Price should be set by the Dairy and must be non-negotiable.
- 19:** With no retail price to set and a new arrangement for setting the producer price, the work of the Milk Price Review Panel can stop.

### **Dairy Farmers** (Section 2.2.C)

- 20:** An early task for the Dairy and farmers must be to establish the future form of milk supply contracts and amendment of the current system of milk quotas for introduction in 2015.
- 21:** It would be valuable for the farmers to work closely with the Dairy to establish more commercially minded **Milk Supply Agreements** that match total farm milk supply to the needs of the market.
- 22:** Dairy Farm Management Contracts should continue, as they are the key to the delivery of some of the Island's wider strategic objectives for the environment through a relatively low intensity farm management system.
- 23:** Future contracts must maintain the current animal welfare and breed improvement requirements, the limits on stocking density, and the need to have a biodiversity action plan in place for the land farmed.
- 24:** The fund for contract payments should be cut over a five year period, reducing to an annual commitment of £1 million by 2019. A further review should be done at the end of this period to assess the need and level for such support beyond that date.
- 25:** Consideration must be given to the mechanism for contract payments if quota is suspended, as the Review Group believe it should be.

### **Legislation (Section 2.2.D)**

- 26:** The legislative controls protecting the Guernsey Cattle Breed should remain in place as they are essential for the future of the breed.
- 27:** Useful powers in the Milk Ordinance should be strengthened and brought up to date, providing clear control over the importation of milk and modernising out of date elements in this legislation.
- 28:** A revised Milk Ordinance should be drafted without delay and it should be brought into force as soon as possible

### **The Changing Industry and New Entrants (Section 2.2 E)**

- 29:** In the future, farms should be of a size that is suited to generating a reliable operating profit and thus making the industry more sustainable and creating farm businesses that will be commercially attractive to new entrants.

### **Loans for Farm Development (Section 2.2 F)**

- 30:** The Department should evaluate the benefit of financial assistance to existing farm businesses and new entrants, perhaps as part of a wider business development scheme for the Island.

### **Land and Planning (Section 2.2 G)**

- 31:** Agricultural and open land should continue to be protected and left undeveloped, leaving a strategic “land bank” for the future of food production and farming. Using the TRP system to create an incentive could have a positive impact on the availability of land for farming.
- 32:** Suitable modern farm buildings should be protected for truly agricultural purposes and not given a change of use. Farmers should be able to develop the facilities needed to support the operation of their farms
- 33:** Some flexibility in planning should exist to assist farms who want to develop uses linked to the operation of a working farm, such a farm shops, to sell the farm’s produce and so encourage the buying of locally produced food and create interest for visitors and locals

### **Farm Services (Section 2.2.H)**

- 34:** Farm Services are a vital and well managed service for the industry.
- 35:** Farm Services represent good value for money and those involved should continue to work closely with the industry and identify further efficiency improvements in the coming years, as they have done in the past.

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## PART 4

### A Coherent Plan for the Future of the Dairy Industry



238. The Review Group noted that this is the fourth report written in 8 years that has considered how the industry should be run in the future. No part of the industry, from farm to retail customer, needs that sort of uncertainty and there must be a better way to give direction and stimulate long term planning.
239. Debate on the dairy industry needs to move decisively from what the Commerce and Employment Department (or the States) is “going to do about it”, to a greater emphasis on empowering the farmers and Dairy to work together.
240. That does not abandon it to its fate, but rather the aim is to provide key protections that will reduce its reliance on decisions of the States to give it direction.
241. **The Review Group’s proposals aim to provide a suitable balance of degree of certainty and confidence for the industry, while reducing the regulatory burden on it.**
242. **This should give all parts of the industry a commercial stimulus to adapt and evolve for the future, able to respond to the market for its products and the wish of the Island to see it, its valued dairy products, and the iconic local Guernsey cattle breed, continue as a part of our countryside and culture.**
243. Ensuring there is **robust control over imports** of milk, combined with an emphasis on the **efficient commercial operation of the Dairy and dairy farms** will allow the States to **reduce its annual spending** on the industry.
244. Drawing together its conclusions, the Review Group proposes the following ten point plan to produce a more sustainable and self-reliant dairy industry in the future.

## 4.1 A Ten Point Plan for the Future of the dairy industry

### **POINT 1: Effective statutory control over the importation of milk (Conclusions: 1; 3; 27; 28)**

245. The Island's Milk Ordinance, dating back to 1958, must be replaced as soon as possible with a new version that ensures that there is clear and effective control over the importation of all milk to the Island. This control will ensure that a market for local dairy production exists and a more self-sustainable dairy industry can continue.

### **POINT 2: A continuing commitment to the Guernsey Breed (Conclusions: 1; 2; 26; 34; 35)**

246. The Guernsey cattle breed is an irreplaceable feature of the Island that reinforces the unique look and feel (the brand) of Guernsey for those visiting and those living here. The dairy industry should continue to be exclusively based on the rearing and farming of the highly regarded and distinctive Guernsey breed of cow.
247. The Department will continue to commit to the breed improvement programme and an Artificial Insemination Service.

### **POINT 3: An independent, but still States owned, Dairy (Conclusions: 5; 6; 7; 9; 10; 11)**

248. The Guernsey Dairy should remain owned by the States and accountable to it via the Commerce and Employment Department, but it should have greater independence to operate in a commercial manner with less political interference.
249. The Guernsey Dairy should be a self-funding business operating for the benefit of the Island. Its successful sales activities should be the key route for funding of the dairy industry and building an adequate capital investment fund for the Dairy. It should not be a source of revenue for the States or a liability to be supported.
250. A further task for the Dairy will be to examine its future needs and consider the costs, benefits, and feasibility of the development of a modern "fit for now" Dairy, possibly on a new site, as this is likely to be needed to realise the full potential for operational efficiency arising from a future independent status.
251. Within the relationship between farms and the Dairy there will be joint decision making on the approach to such things as milk quotas, the producer price, seasonality payments, quality and milk constituent payments and so on, to best deliver an adequate local milk supply, farm development, efficiency, and profitability.

**POINT 4: A firm commitment from farmers to a year-round supply of milk for the Island  
(Conclusions: 4; 20; 21)**

- 252. The Guernsey Farmers' Association must take responsibility for a guiding and coordinating role with the industry. They should encourage farms to adjust calving patterns as necessary to regularly boost autumn and winter production to remove the risk of running short in winter and early spring.
- 253. The dairy industry should be a balanced partnership between dairy farmers, the Dairy, and their customers. In the future, the key operational focus and responsibility should be in the hands of the Island's dairy farmers and the Guernsey Dairy.
- 254. The States, through the Commerce and Employment Department, should maintain an overview of the industry and Dairy and ensure the key protections are in place, but remove a good deal of the interventionist and costly bureaucracy that is currently in place.

**POINT 5: A simpler approach to milk pricing in the industry (Conclusions: 8; 9; 16; 17; 18; 19)**

- 255. The Gate (or wholesale) price of milk should be set by the Dairy, taking into account its costs of production and the producer price it pays to farms for raw milk.
- 256. The Dairy's Gate Price must not be commercially negotiable with the Dairy's customers as that would risk the erosion of farm incomes and the operating surplus of the Dairy, both of which are vital for re-investment.
- 257. The Department will maintain a "watching brief" on the Dairy and its pricing and would be able to intervene if there was evidence that the single route to market was not properly taking into account operational efficiency and consumers' needs.
- 258. Farm Producer Prices will be negotiated between the Dairy and farmers, as will contracts to supply milk to the Dairy.
- 259. The retail price would not be set, simplifying the system and allowing a relatively normal retail market to operate, which should provide opportunities for consumers to benefit from competitive pricing in shops.

**POINT 6: The continuation of Dairy Farm Management Contracts (Conclusions: 22; 23; 24; 25)**

- 260. Dairy Farm Management Contracts should continue, as should some funding in recognition of the value and importance of the dairy industry, delivering some of the Island's wider strategic objectives for the environment through a relatively low intensity farm management system.

- 261. Contracts will maintain the limits on stocking density, the breed improvement and animal welfare requirements, and the need to have a biodiversity action plan in place for the land that is farmed.
- 262. It is envisaged that the milk quota arrangements will be amended or suspended in future, in favour of flexible and commercial milk supply contracts between farmers and the Dairy.
- 263. Contract payments should move by 2015 to be based on the farm environmental management of land and the number of cows in the milking herd.
- 264. With firm milk importation controls in place and a retail price that is not fixed, the States' annual funding into the dairy industry can be reduced.
- 265. The Review Group consider that, to allow a period of adjustment to the resulting changed financial balance, the fund should be reduced over a five year period to an annual commitment of £1 million by 2019.
- 266. A further review should be done at the end of this period to assess the need for, and level of, such support beyond that date.
- 267. As this support funding represents an income stream for dairy farms, reductions will require the Dairy to consider carefully the producer prices it pays to dairy farmers, which may have to be increased. If that is the case, this can be expected to produce some upward pressure on the Gate Price of milk, which can be mitigated by increases in operating efficiency at the Dairy, increased production efficiency on the reduced number of larger farms anticipated, and by competitive retail milk pricing.

**POINT 7: Support for farm business development (Conclusions: 29; 30)**

- 268. The Department should re-examine the case for assistance for farm development and new entrants in the form of farm loans, but as part of a wider commitment of the Department to business development for the benefit of the Island.

**POINT 8: Protection for agricultural land and flexibility for ancillary uses  
(Conclusions: 31; 32; 33)**

- 269. The vision for a sustainable future for the dairy industry is based on the view that much of our current open land (including a good deal of that which was temporarily used, but is no longer needed, for commercial horticulture) has to be given clear and strong protection from other uses to allow a sufficient, strategic, bank of land to be available for productive agricultural use in the future.

270. The industry may be able to benefit from farms being allowed by the planning authorities to develop ancillary activities, such as farm shops, in a carefully controlled manner.

**POINT 9: Modernised arrangements for milk distribution & retailing (Conclusions 12;13;14;15)**

271. The Review Group recognises that there may be aspects of the current milk distribution system that can be improved (such as cool chain handling), but it also recognises the investment of money, time and effort that has gone into existing milk distribution businesses.
272. So, whilst it would prefer this aspect of the dairy industry to operate in a straightforward commercial manner, the Review Group considers that a degree of protection is justified for milk distributors at the present time.
273. The Milk Ordinance should be brought up to date, replacing all Milk Retailers' Licences, whether actually issued or not, with new, explicitly non-exclusive, Milk Distribution Licences. In the future, only licensed milk distributors should be able to purchase milk from the Dairy. The Dairy should be directed that it shall not sell milk directly to shops or take on milk deliveries of any sort.
274. The Dairy will set out the terms and conditions of trading with holders of Milk Distribution Licences in non-statutory Milk Distribution Agreements.
275. In the future, and with the provisos mentioned above, change and restructuring in the distribution sector should still come about as it does now through commercial discussions, negotiations, and decisions between distributors and between distributors and their customers. This principle must apply also to "zoning" and there is no case, or need, for the Department or the Dairy to become involved, except to ensure, in exceptional circumstances, that supplies to key outlets are maintained.
276. The operation of the existing Dairy Trade Counter should be changed and in the future all of the Dairy's manufactured products (cream, butter, cheese etc.) should be available for commercial customers to purchase.

**POINT 10: A new Milk Ordinance (Conclusions: 12; 27; 28)**

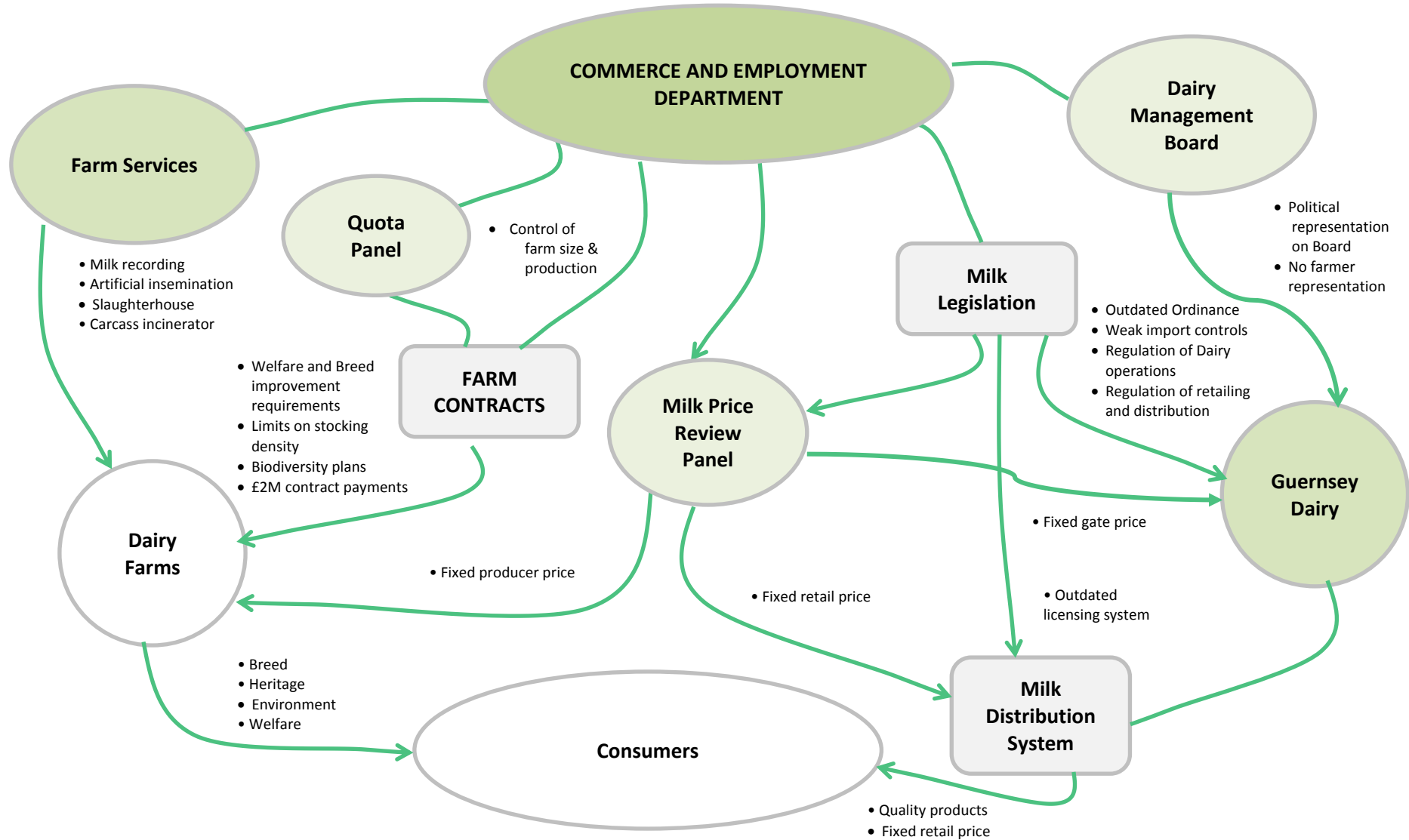
277. The Milk Ordinance has been amended several times and the amendments and repeals discussed in this report will change it further. There is merit in repealing the whole Ordinance and enacting a new, more coherent and understandable piece of legislation.
278. Out of date regulatory measures in the current legislation should be removed in a new Ordinance. The Department should, ideally, only retain broadly regulatory and legislative responsibility for the dairy industry, alongside general oversight and the provision of a viable central dairy.

## 4.2 Industry Outcomes from this Plan

279. The key outcomes that the Review Group's proposals aim to produce are :-

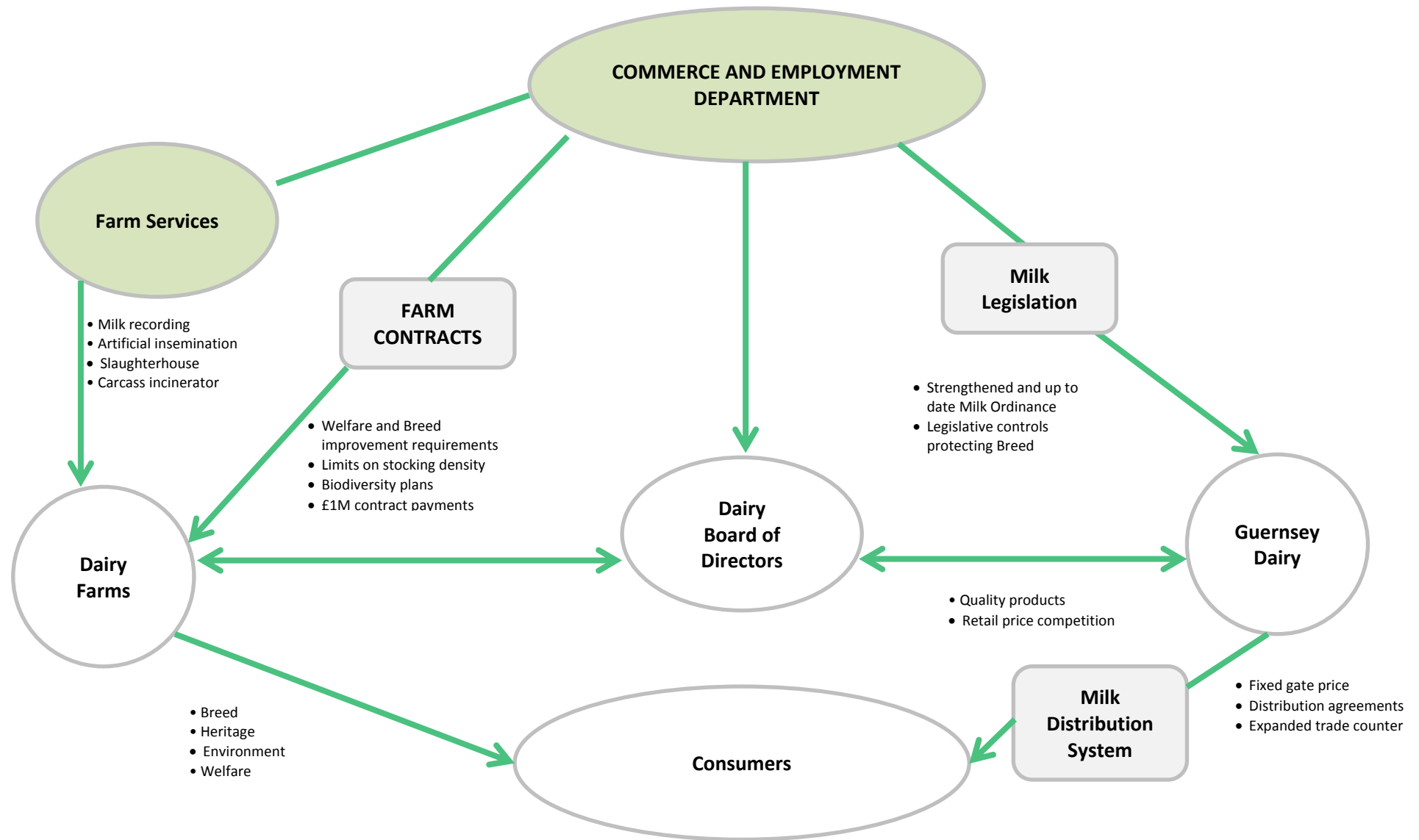
- The continuation of the Guernsey Cow as the sole dairy cattle breed on the Island within a self-sustaining farming sector.
- The continuation of the Guernsey Cattle breed development programme.
- The Guernsey Dairy operating with greater efficiency, freedom and responsibility.
- The Guernsey Dairy investing in a timely manner to improve the reliability of its operation and the quality of its products.
- Dairy farms investing with confidence in the future, maintaining production in order to supply the Island's liquid milk needs.
- Farm production closely aligned to demand throughout the year.
- Farmers and the Guernsey Dairy working together to plan the future of the industry.
- The dairy industry remaining environmentally responsible, with high animal welfare standards.
- Effective control of milk imports.
- Consumers benefiting from retail price competition.
- Milk distribution and doorstep sales continuing in a normal commercial environment.
- The Island's countryside retaining its traditional appearance with a strategic reserve of open land for the future.
- The cost to the Island of support of dairy farming reducing.

Dairy Industry Flowchart – 2014 current situation





## Dairy Industry flowchart – Proposals for the Future



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## PART 5

### Taking the Plan Forward



## 5.1 Priorities for Action

280. The Review Group considers that the two key priorities that need to be addressed to move this vision forward are:-

- to firmly and clearly modernise the legislative framework that binds the industry together. (An outline of necessary changes is shown below in section 5.3)

and

- to draw the farmers into a close and collaborative role alongside the Dairy and to charge them both with the task of defining how, in detail, the industry can serve its customers' needs and the Island's expectations in the coming years.

They would be in charge of the destiny of their industry, but within the protections and regulation maintained by the States.

281. The Review Group considers that there are a number of important issues referred to in this report that must be the topic of discussion between the Dairy and the dairy farmers (and involving the Department in some cases) in the coming 12 to 24 months. An illustrative list is:-

- The possible suspension of milk quotas.
- The development of new Dairy Supply Agreements.
- The management of raw milk production for year round supply.
- The development of agreed mechanisms for establishing the producer price.

282. There will also be a need for open and productive discussions between the Dairy and the Island's milk distributors over the changes proposed to:-

- Milk Distribution Agreements,
- Liberalised and non-discriminatory access to all Guernsey Dairy manufactured products (but excluding milk) for its commercial customers (from 2016)

283. Finally, if proposals for a more independent Dairy are accepted in principle, the Department and the Dairy will need to research the possibilities and report back to the States with considered proposals within 18 months.

## 5.2 A New Milk Ordinance

284. A new Milk Ordinance, replacing the current one, should reflect the following elements, which draw together a range of proposals from the Dairy Industry Review. Some of these introduce greater flexibility, whereas others update and confirm strict controls (such as on importation) and modernise arrangements. A list for further consideration is as follows:-

- The definition of milk in the Ordinance should be changed to match the definition in the enabling Law, to cover all liquid milk including UHT.
- Regulation should continue to exclude from control types of milk that are formulated with other ingredients, e.g. milk shake.
- There should be a continuation of the obligation for all milk produced on Island dairy farms to be offered to, and accepted by, the Dairy.
- The importation of milk should continue to be banned; the Dairy would be exempt from this ban.
- The definition of sale by retail and wholesale should be clarified. In the future only milk distribution would be the subject of a non-exclusive licensing process, with the Dairy establishing the terms and conditions of trading through non-statutory distribution agreements.
- There should be no retail price control, with shops and distributors being free to sell milk at whatever price they wish.
- The Producer Price for raw milk should be set by the Dairy and could be paid in respect of milk constituent content, if that was considered appropriate.
- The Dairy should set the Gate Price for its products including liquid milk. The Gate Price for liquid milk would be non-negotiable to protect the viability of the Dairy operation and the income of dairy farmers.
- The Dairy will follow, as it does now, milk testing equivalent to European standards. Unnecessary public health provisions (dating back to the 1950s) can be repealed.

### 5.3 An Outline Implementation Timetable

#### **2014**

- If the States agrees, the Department to then commence research into a more independent model for the governance of the Dairy, returning to the States with proposals in due course.
- Dairy to collaborate with farmers on the development of new milk supply contracts and the suspension of the quota system (for the 2015 contract year).
- Department to discuss new arrangements for the Dairy Farm Contract payments with farmers in the light of the likely suspension of the quota system (to commence in 2015).
- Dairy to collaborate with the GMRA on the new Milk Distribution Agreements.
- A new Milk Ordinance to be drafted.

#### **2015**

- First annual reduction of £200,000 in the Dairy Farm Contract Payments fund. The fund will reduce over a 5 year period and by 2020 will have reduced to £1 million.
- New milk legislation to be drafted and introduced as soon as possible.
- Gate and producer milk prices to be set by the Dairy in consultation with the Dairy farmers.
- The retail price of milk will no longer be set.
- Milk Distributors to be issued with Milk Distribution Licences once new legislation is in force.

#### **2016**

- Possible return to the States with proposals for a more independent Guernsey Dairy.
- All Dairy products (excluding milk) to be available to commercial customers of the Dairy.
- Subject to States' approval, the Dairy to move to a governance structure more independent from the States, and working closely with dairy farmers.

#### **2020**

- Departmental review of States revenue funding following the completion of the staged reduction in revenue support funding for Dairy Farm Management Contracts.



## APPENDED DOCUMENTS

1. Consultation Paper 2013 Dairy Industry Review – Industry Trends
2. 2013/2014 Dairy Industry Review Consultation Record
3. Guernsey Dairy Industry Initiative Group - Island Residents Survey August 2013
4. Dairy Farm Management Contract – example
5. Guernsey Dairy Industry – Trends in business performance (Dr A Casebow)
6. The Guernsey Cattle Breed
  - (a) The State of the Breed (Mr W Luff)
  - (b) Guernsey Cattle into the future (Dr M Bichard)



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## Commerce and Employment

## States of Guernsey

# Consultation Paper

## 2013 Dairy Industry Review – Industry Trends

Date: 4th March 2013(v2.1)

### Purpose and type of consultation

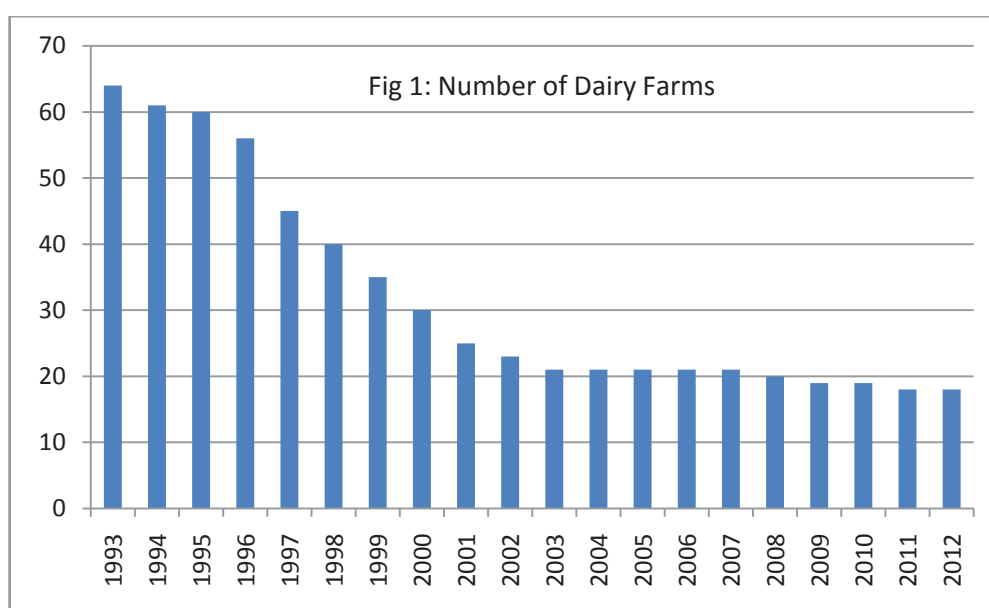
The Department is charged with submitting a report to the States before the end of 2013 giving a strategic vision of the Dairy industry and its relation with the States.

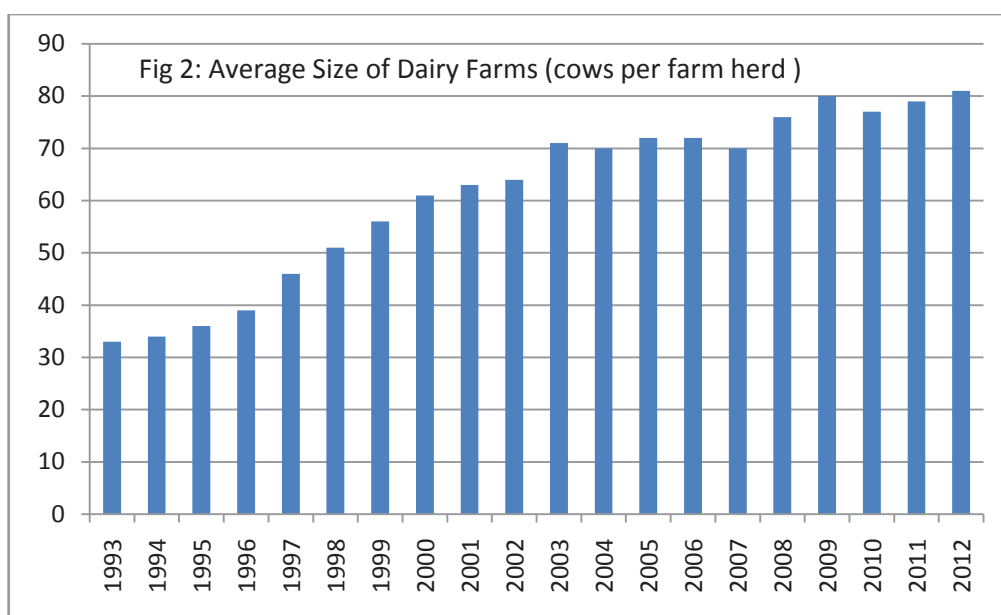
The Department is consulting in two stages with Industry stakeholders and the purpose of this document is to present a common set of statistics describing the industry and from which such trends as may be visible can be considered when looking at the future of milk supply and the local market for Guernsey Dairy products.

This document will be distributed to stakeholder groups for the introductory consultations in March 2013 which aim to provide a forum for general and strategic considerations of the challenges, needs and future direction of the dairy industry.

They will later (augmented as necessary) be incorporated into a second stage when the possible policy direction that the Department is considering will be put to stakeholders for further consultation. The second stage consultation will take place in the summer (June/July).

### FARMS





## Comment

The number of farms fell sharply in the 1990s (Fig 1) partly as a result of retirement and partly as a consequence of the introduction in 1995 of local standards equivalent to the UK “Milk and Dairy Regulations. This measure introduced higher on farm and milk production hygiene standards and a number of farms, unwilling or unable to meet these standards. Numbers then steadied at the turn of the decade. This has been offset by a corresponding increase in herd sizes (Fig 2) and has meant that milk production (allowing for the introduction of the quota system) has generally remained high enough for local needs.

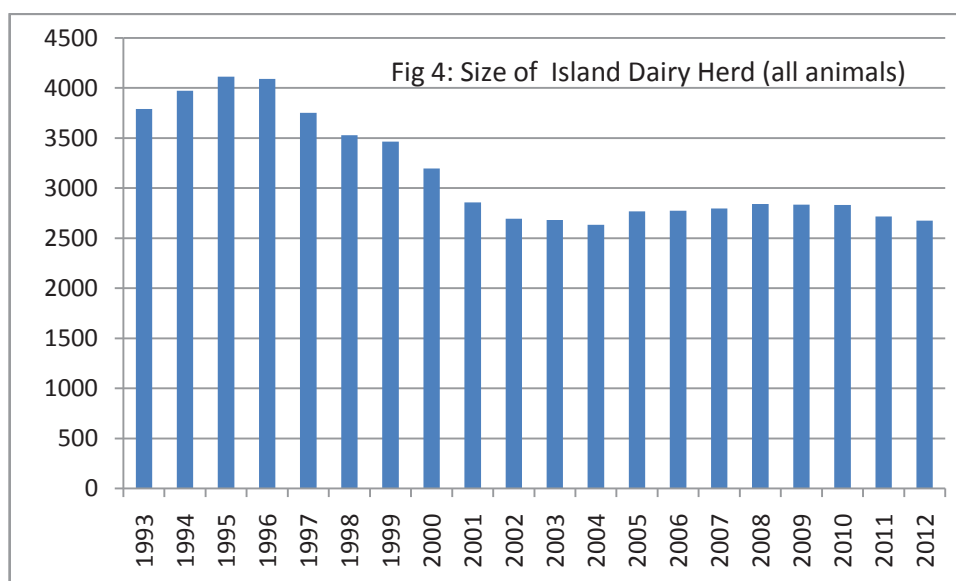
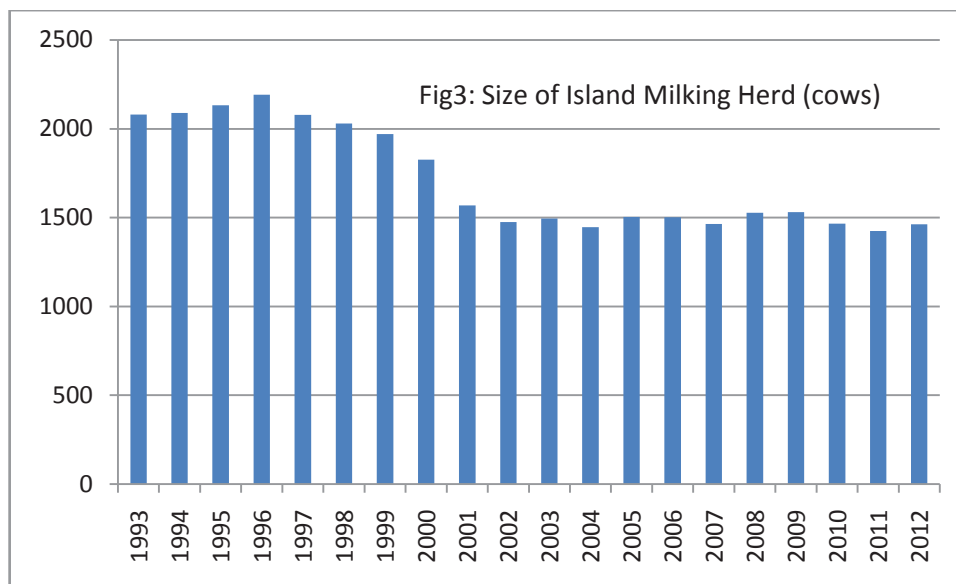
To some extent the number of farms is not crucial if herd sizes are large enough to supply demand. However, the pattern of land ownership in the Island has resulted in a fragmentation of farmed land and thus increasingly large farms may not be possible unless they were able to move to a more intensive management system using less grazing in fields and more housing of cattle.

Succession is an issue and, although there is considerable interest in farming, establishing a viable farm has proved difficult in recent years for young farmers. If the number of farms falls further there is a risk that production could fall below demand. If the Island has to rely on supplies from a smaller number of (possibly larger) farms, the impact of the loss of even one of those farms could have a significant impact on production.

Increasing farm size often requires investment in farm infrastructure (Milking parlours, cattle housing and slurry storage), labour and additional land. Planning issues have a bearing and can affect the manner and extent to which a farm can grow. It is a feature of dairy farming in Guernsey that the land in farm holdings is scattered, which limits efficiency.

Few, if any, farmers have stopped farming in recent times due to economic factors and most have stopped farming only as they retire, although increasing regulation of farming, particularly to ensure better standards of hygiene, undoubtedly quickened the pace of retirement in the 1990s.

## DAIRY HERD



## Comment

Milk production increased in the 1990's due to a combination of favourable factors that included:

1. Expanding milking herd sizes in the early 1990's as larger farms were developed, particularly by younger farmers;
2. Milk yield per cow increasing due to breeding for higher milk production (the influence of North American bloodlines), better feeding with high energy and protein diets, and the greater management expertise of dairy farmers;
3. The increased milk production per cow meant that the total Island milk production was maintained throughout the late 1990's although both the cow numbers in the island milking herds and the total number of cattle in dairy herds (that included young-stock) was reducing.

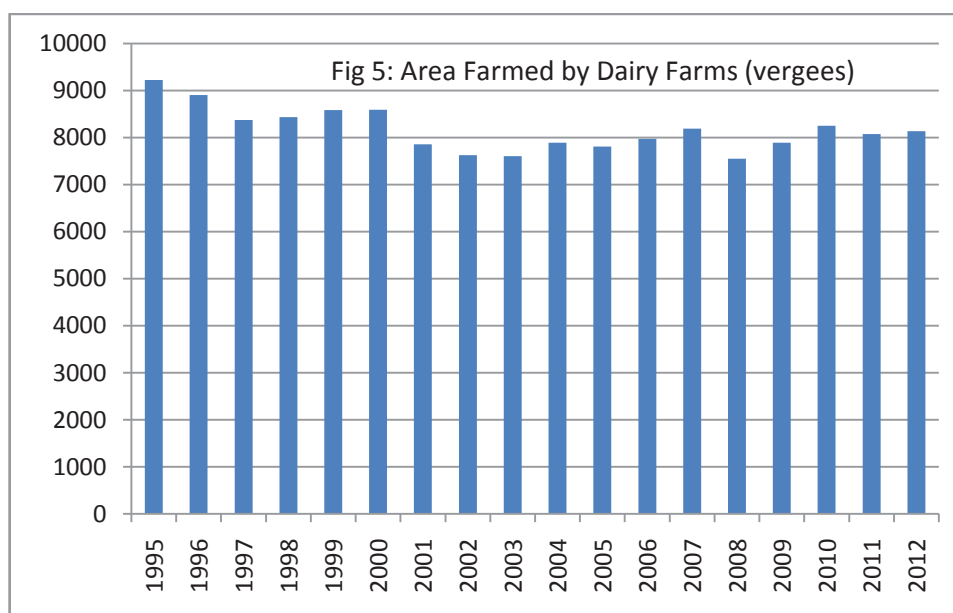
4. Board policy that allowed higher farmer payments for milk production (Governed by the Milk Returns Less Dairy Expenses principle), which led to significantly higher farmer payments for milk in the early 1990's. By the late 1990's the upward trend in prices was reversed as the export of cheese manufactured from high cost milk, caused both Dairy and farm profitability to fall.

In 2001, the quota system was introduced to counter the increasing milk production that had occurred in the 1990's. The quota system was designed to reduce the annual production of milk from some 9.8 million litres down to 8.1 million litres which, it was reasoned, would provide sufficient milk for the local population provided that it was delivered in equal amounts throughout the year. In this way the loss-making export of cheese utilising surplus milk production could be discontinued.

In anticipation of the introduction of quotas farmers reduced the number of cows in Island herds during 2000 and 2001. Similarly, they needed to keep fewer young-stock as 'replacement' animals in the herd.

After the introduction of quotas in 2001 the number of cattle dipped as farms "over corrected" for the production cut. Cattle numbers built through the last decade but have fallen back since 2010.

## LAND



## Comment

(Note: 1 acres = 2.46 vergees)

The amount of land used by dairy farmers has declined since the mid 1990s. Whilst the total area of farm land used by dairy farmers has fluctuated over the past 10 years, there has been little overall change. Much of the variation has been caused by the growing of potato crops on a small number of these farms. In reality, although farmers are always justifiably very concerned about the area of

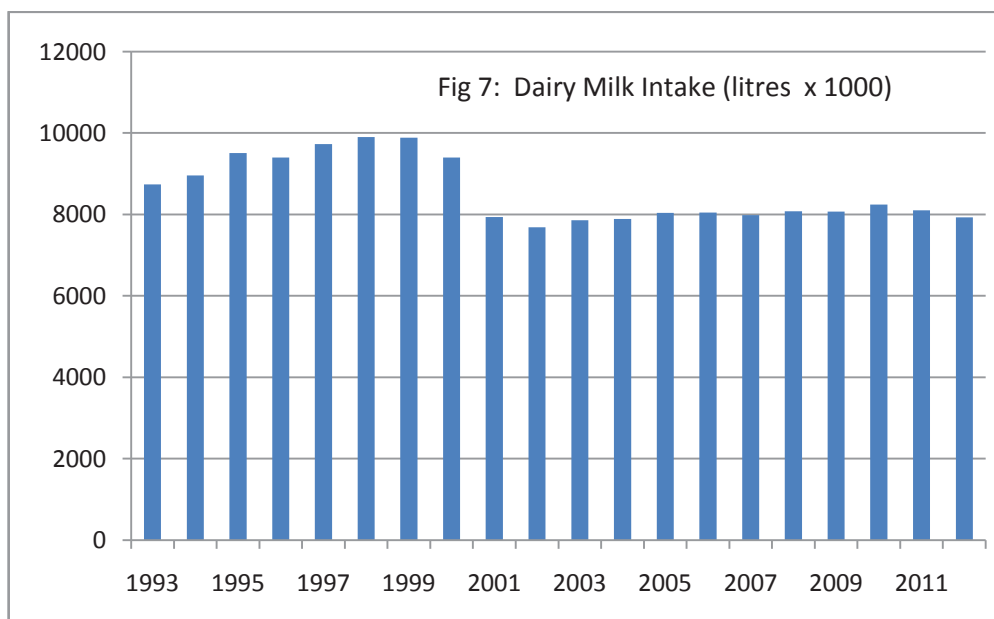
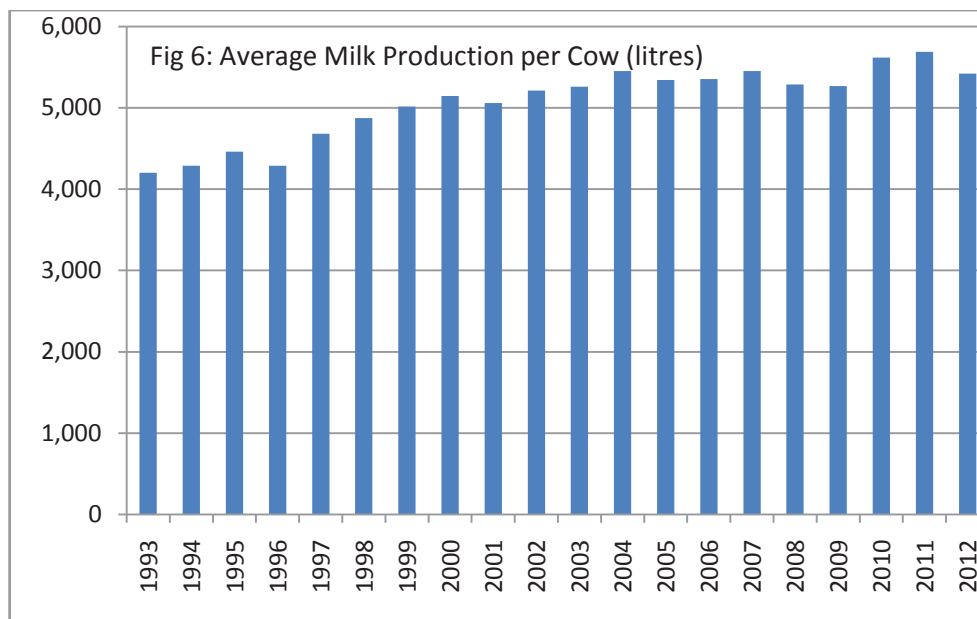
agricultural land that is available for milk production, the area of land used by dairy farmers for 'forage' (in other words for the growing of grass, maize and fodder beet for eating by cows, as well as a small area of cereal crops) has remained remarkably constant, with a dip in the mid-2000's following the death of one farmer and the cessation of the farming activities by his family.

A number of factors have influenced the area of land in use by dairy farms, including:

1. Initially, there was a substantial reduction in the number of dairy farmers and, probably at much the same time, an increase in the number of horses used for recreational purposes. Each time that a farmer retires and the farm goes out of milk production, a part of the area of land farmed is used for other purposes and does not necessarily go back to another farmer but may be used for other purposes
2. A very large percentage (some 85%) of land used by dairy farmers is not owned by the farmer, but is rented on an annual tenancy agreement from a large number of landlords.
3. The number of dairy farmers in the Island has remained remarkably constant over the past 10 years. At the same time Planning Legislation that aims to protect agricultural land from development appears to have been remarkably effective. This, coupled with the Environment Department's active consultation with this Department on all matters where agricultural land is threatened with development, has undoubtedly protected considerable areas of open and undeveloped agricultural land.
4. Farmers have always been keen to take on areas of good land, particularly land that is in larger blocks that is readily used by mechanised equipment and close to an existing farm. However, some land has been lost to domestic gardens and the creation of parkland. Land has also been lost to horse grazing, but land that is used for horses also tends to come back into farm use at some time in the future.
5. Land that has been reclaimed following glasshouse demolition does come back into dairy farm use, but it is perhaps more likely that this will be used for other purposes, such as horse grazing. However, it is likely that the area of land made available following the demolition of glasshouses each year, has in some way reduced the pressure for alternative use (horses) on some of the better quality agricultural land.

The introduction of dairy farm management contracts has meant that farmers must not become what is considered to be 'too' intensive. Each farmer must have 3.05 verges of forage area for each livestock unit (cow equivalent). This means that the minimum area of land used by each farm is influenced by the size of each farmer's dairy herd.

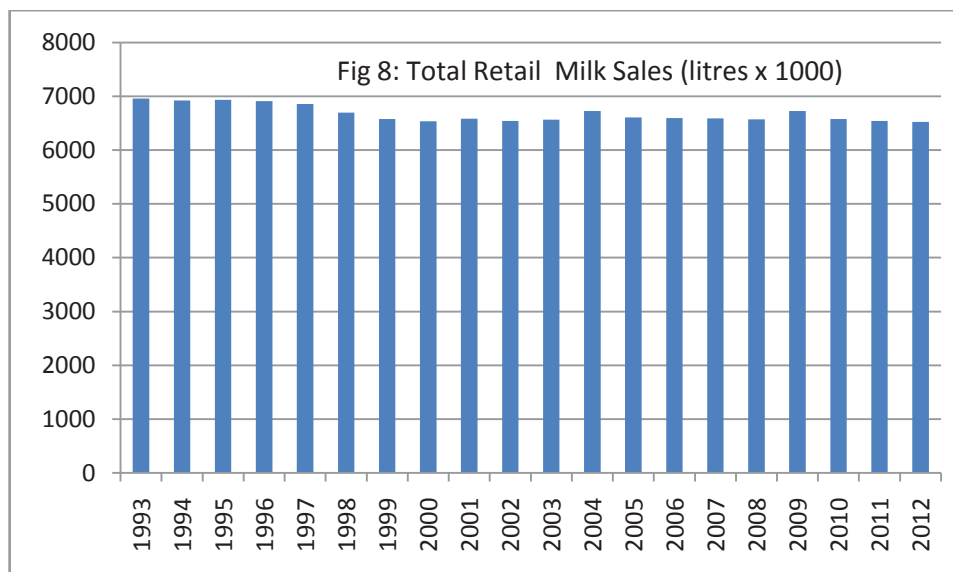
## MILK PRODUCTION



### Comment

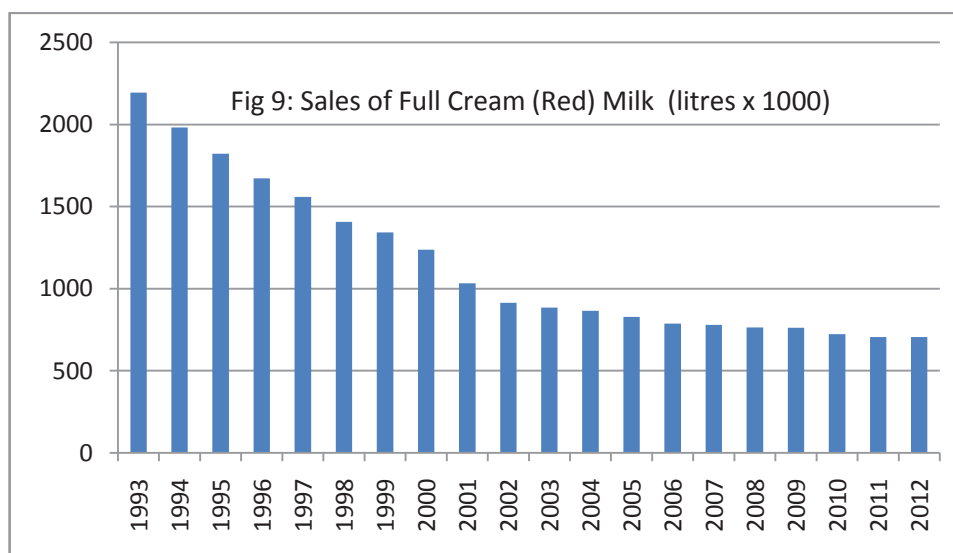
The sharp decline in raw milk production in 2001 was the result of a States Resolution to introduce milk quotas. This was successful and had the benefit of stopping over-production i.e. more milk being produced than was required for Island sales - a situation that was driving the Dairy into operating at an annual loss. It was calculated from the outset that the Dairy needed circa 8.1M litres of milk per annum (equally distributed over a 12 month period) to satisfy the local demand for liquid milk and to have sufficient as a buffer that could be turned into dairy products, principally cheddar cheese. Farmers over-adjusted when milk quotas were first introduced and as a result raw milk production took several years to achieve a level where imports weren't necessary at critical times each year.

## SALES OF MILK



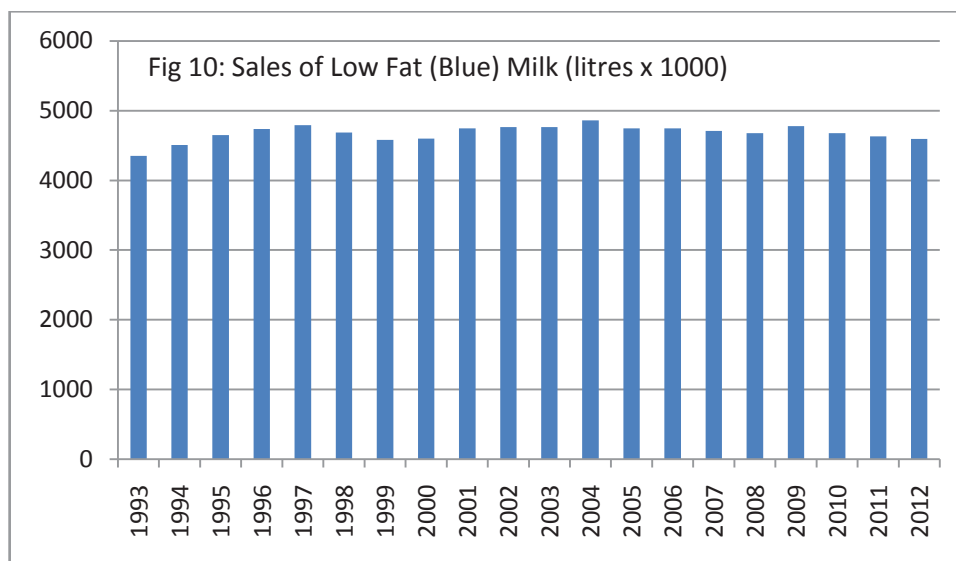
### Comment

Total milk sales have remained relatively static over the past decade. However; there has been a market shift in the type of milk that is consumed on the Island brought about primarily by increased public awareness of the potential value of a healthier diet containing less fat. Note: the noticeable increase in sales in 2004 and 2009 can be attributed to a trading year that captured sales data over a 53-week period.



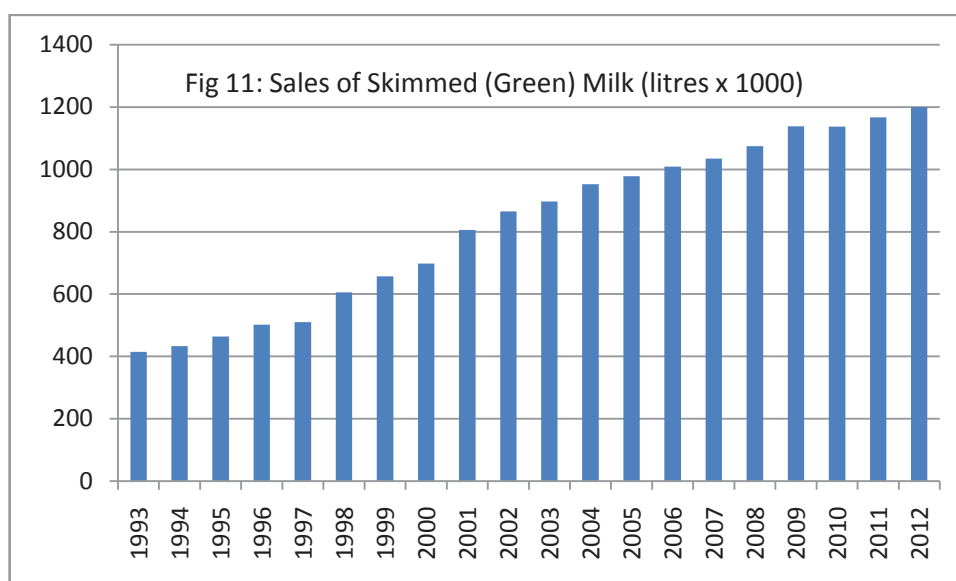
### Comment

Sales of full-cream milk have seen a steady decline as a shift in consumers attitudes towards low-fat 'healthier' alternatives offered by the Dairy have taken affect (Fig 9). Sales of full cream milk represent 10.81 % (705,526 litres) of total liquid milk sales.



## Comment

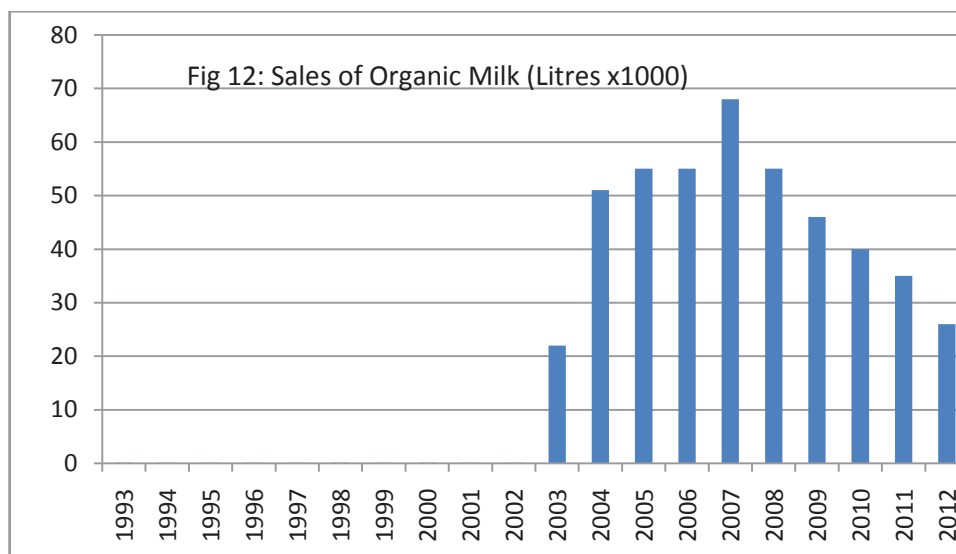
Low fat milk maintains the largest market share of all milk sold on the Island at 70.40 % (4,594,181 litres). Whilst there has been a noticeable decline in sales in favour of the skimmed variant, this product line continues to be the milk of choice for the majority of consumers and catering establishments.



## Comment

Skimmed milk sales have grown steadily since the early nineties displacing sales of full-cream and low-fat. Skim milk sales represent 18.38 % of total annual milk sales (2012) and by virtue of the 'skimming process' directly increases the amount of cream that the Dairy has available with which to produce a variety of milk-products; principally in terms of value to the business – butter.

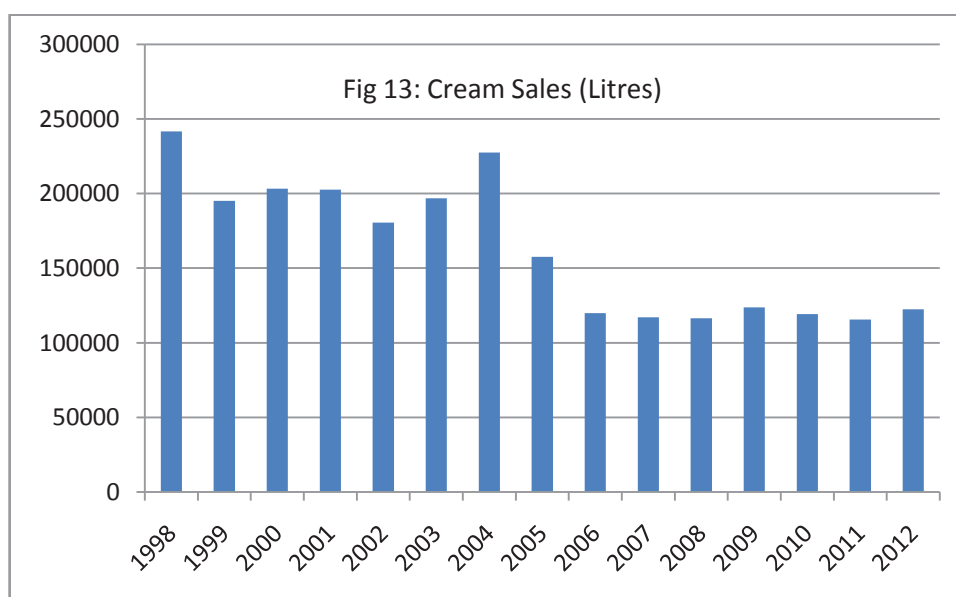




## Comment

Organic milk was introduced as a product line in 2003. The Island has one organic milk producer who provides the Dairy with all of the milk that it needs to be able to meet local demand. The farm, and the Dairy, undergo annual audits and are accredited by the Soil Association as maintaining 'Organic status'. The higher price paid for locally produced Organic milk is represented by the price differential seen on the retail price – both of which are set by the independent Milk Price Review Panel – when compared to other milks produced by the Dairy. As with any high value niche market product sales are often higher when the economy is strong with the opposite effect occurring in time of austerity. This is reflected by the recent decline in sales.

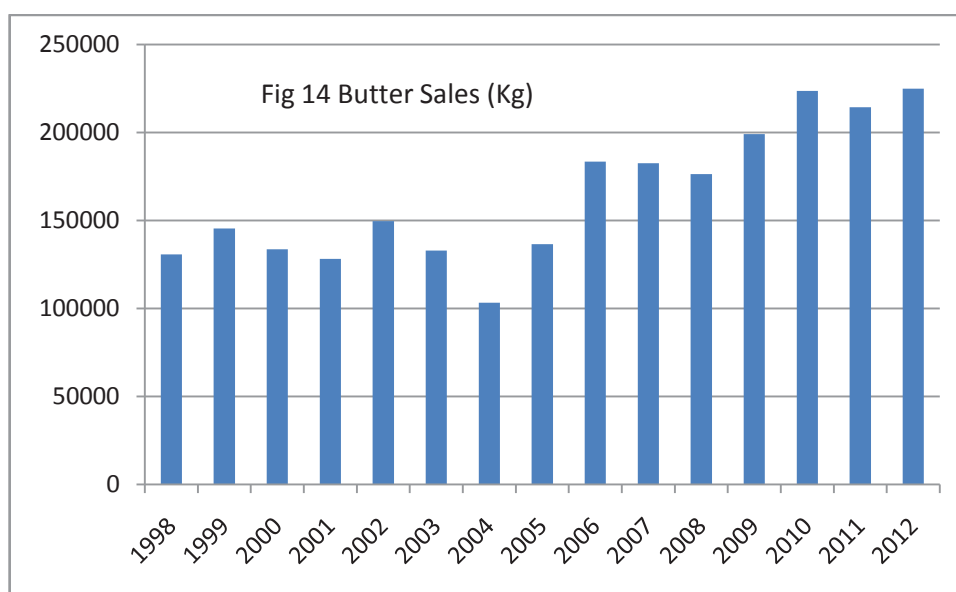
## SALES OF DAIRY PRODUCTS



## Comment

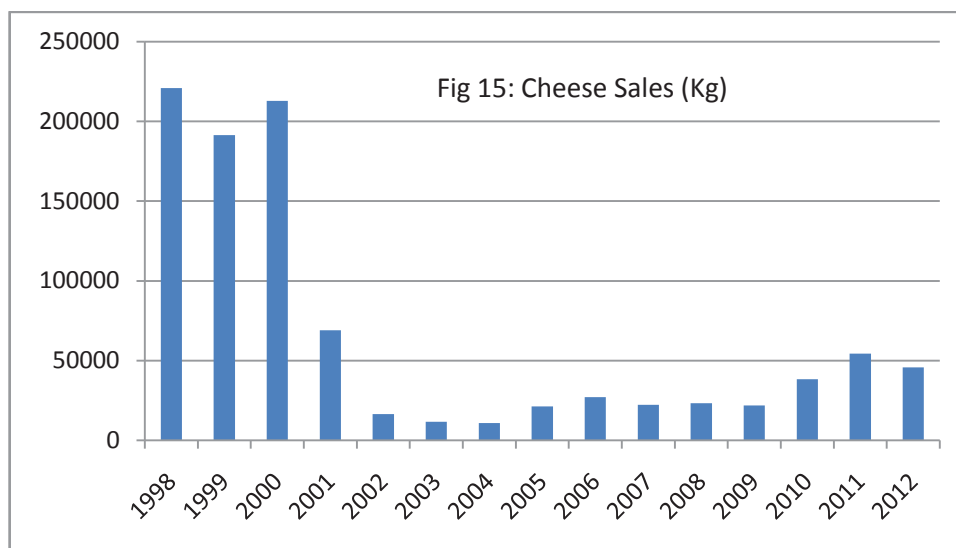
Liquid cream sales were high between 1998 and 2004 when the Dairy was involved in the production of Channel Island Cream Liqueur (CICL) as part of collaboration with another locally based company. The drop in sales from 2005 was brought about by the relocation of CICL to the UK (having been purchased by W. Grant Distillery) with the inherent cost of producing the product and shipping to the UK (prior to bottling) having a detrimental impact on its financial viability.

The Dairy turned its attention to butter (a natural market as excess cream is churned into butter) and actively brought about the demise of large quantities of imports used in the catering sector by competing on quality, price and availability.



## Comment

The availability of butter increased from 2005 as the Dairy ended its long-standing association with Channel Island Cream Liqueur. By offering a quality product at a competitive price and opening up the product to a wider customer base (the advent of the Trade Counter) the Dairy were able to secure a foothold in the catering sector of the market. 2006 saw the Dairy secure a supply contract with Waitrose UK and the commencement of GD retail wrapped butter being available in a UK retail multiple whose ethos and commitment to quality matched those of our own. This relationship has been of mutual benefit for both businesses with the Dairy maintaining continuity of supply to both the local retail and export markets. Butter continues to represent a valuable revenue stream for the Dairy.

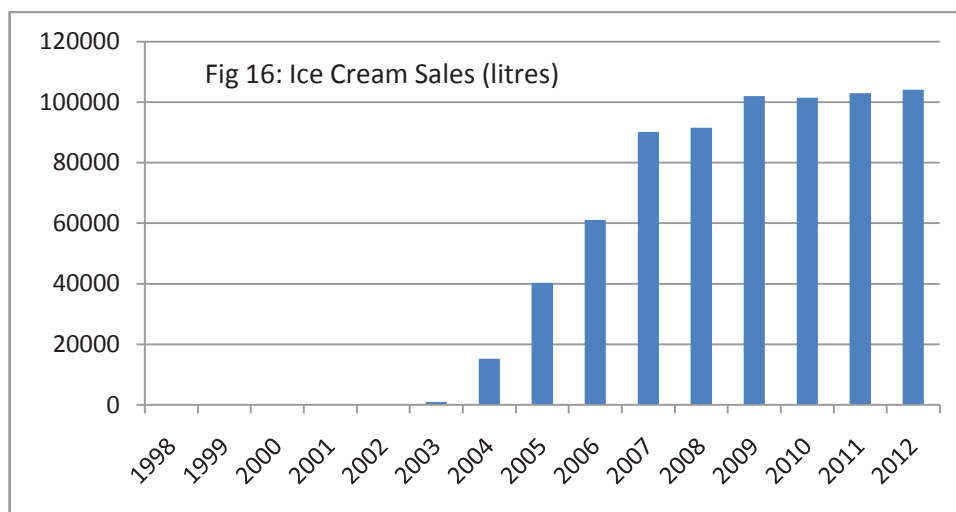


## Comment

Prior to introduction of milk quotas (2001) the Dairy had more milk than could be sold as liquid milk (in cartons). The 'excess' milk was manufactured into cheese (the 'sink product' for using surplus milk) but the high price paid for local milk compared to that paid by UK cheese manufacturers has meant that the Dairy simply cannot compete financially with imported cheese.

Large consignments of cheese were exported off-Island at below the fully absorbed manufacturing cost, (i.e. at a substantial loss) impacting on the Dairy's overall financial well-being.

Cheese production continues to track raw milk availability with any surplus milk i.e. that which isn't needed to maintain continuity of supply of fresh liquid milk, being used to produce a variety of local cheeses. Currently all cheese produced is sold locally to the catering or retail sector as bulk i.e. deli-counter, or fixed weight retail wrap.



## Comment

Ice-cream was introduced by the Dairy towards the end of 2003. This was primarily packaged as either a 110 ml or 500 ml carton and was specifically positioned at the luxury, high value niche market sector. Despite sales building year on year it was recognised that this sector of the market was notoriously difficult to penetrate with any great success and in 2007 the ice-cream was repositioned as a high quality 'dairy' ice-cream. New packaging and pack sizes were introduced along with a complete review of flavours and ingredients used. Catering lines and more 'mainstream' flavours were added, along with the development of a 'soft scoop' recipe. This appealed to a wider audience with both catering and retail sales increasing and demand having now reached the capacity of the plant and storage facilities available.

**Dairy industry Review Consultation Record****2013**

<b>February 15<sup>th</sup></b>	Law Officers
<b>March 18<sup>th</sup></b>	Guernsey Dairy staff
<b>March 19<sup>th</sup></b>	Dairy Management Board
<b>March 20<sup>th</sup></b>	Guernsey Farmers' Association and Royal Guernsey Agricultural and Horticultural Society (RGA)
<b>April 9<sup>th</sup></b>	RGA  Guernsey Milk Retailers' Association (GMRA) representatives
<b>April 10<sup>th</sup></b>	Royal Agricultural University (previously Royal Agricultural College)  States Veterinary Officer
<b>June 11<sup>th</sup>/12<sup>th</sup></b>	Shop Retailers <ul style="list-style-type: none"> <li>• Sandpiper CI;</li> <li>• Creasey's M&amp;S Franchise;</li> <li>• Forest Stores;</li> <li>• Alliance;</li> <li>• CI Co-operative Society</li> <li>• (Waitrose were unable to attend, but subsequently submitted written comment)</li> </ul>
<b>June 12<sup>th</sup></b>	GMRA
<b>July 18<sup>th</sup></b>	Law Officers  GMRA  Milk Price Review Panel  Manor Farm Foods
<b>August 6<sup>th</sup></b>	GMRA
<b>Sept 12<sup>th</sup></b>	Mr Andrew Le Gallais – Chairman Jersey Milk

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# Guernsey Dairy

## Consumer Opinion Survey

November 2013

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tel: +44 (0)1481 716227  
info@islandanalysis.com  
www.islandanalysis.com

## Background

In 2012, Guernsey Dairy undertook an island-wide survey to ascertain the value placed by Island residents on locally produced Guernsey milk despite the cost per litre being higher than in the UK. In addition, the Dairy wanted to carry out an advertising and PR programme which enhanced the benefits to the Island of locally produced milk and there needed to be some measure in place which monitored the views of residents with regard to local milk over the course of time.

It was also an important point to take into account at the time that while there was legislation in place banning the importation of milk to the Island, it was questionable whether any conviction with regard to such importation would be upheld if taken to appeal.

In 2013, due to local production issues, the importation of milk did take place and UK produced milk was available in the Island.

To assess whether the programme of promotion has had a positive impact on the sale of locally produced dairy products and whether there has been an adverse effect on local sales as a result of the importation of non-locally produced milk, Island Analysis was invited to undertake a follow-up benchmarking survey of a representative sample of Island residents to ascertain changes in consumer trends and opinions over the course of the last year.

## Methodology

An online survey was carried out of a representative sample (e.g. age, location, etc.) comprising 575 island residents (59% females and 41% males). In 2012, the sample comprised 537 residents (56% females and 44% males). The findings from this survey have been benchmarked against the 2012 results to monitor changes in public opinion with regard to Guernsey milk. A sample of 575 has a degree of error of just over +/-4%.

The age profile of the sample was as follows (Figure 1) which is similar to the 2012 sample.

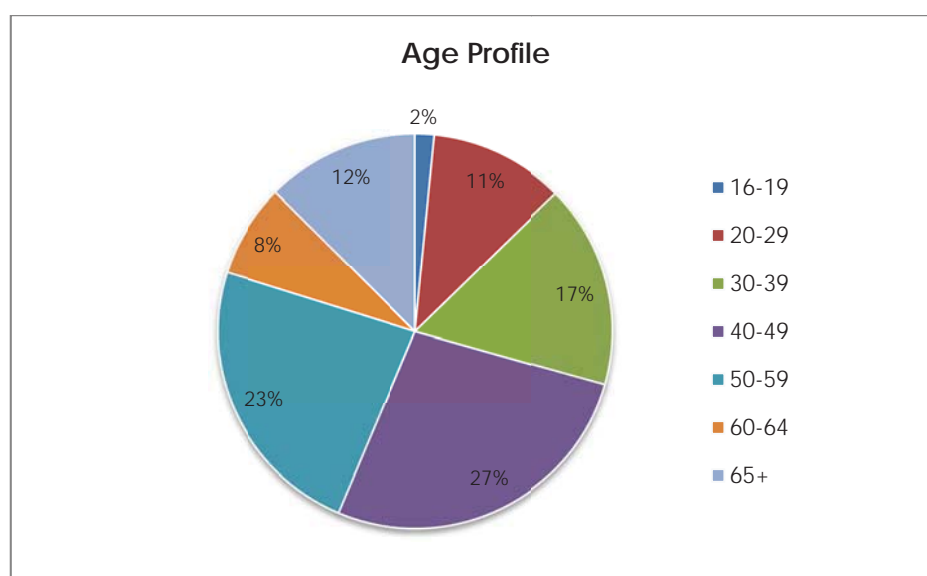


Figure 1



In terms of length of residency in the Island, 20% (16% in the 2012 survey) had been resident in the Island for under twenty years while the 80% (84% in the 2012 survey) had been resident for greater than twenty years (Figure 2). It should be noted that there are no current official figures available on length of residency in the Island. The last census was undertaken twelve years ago.

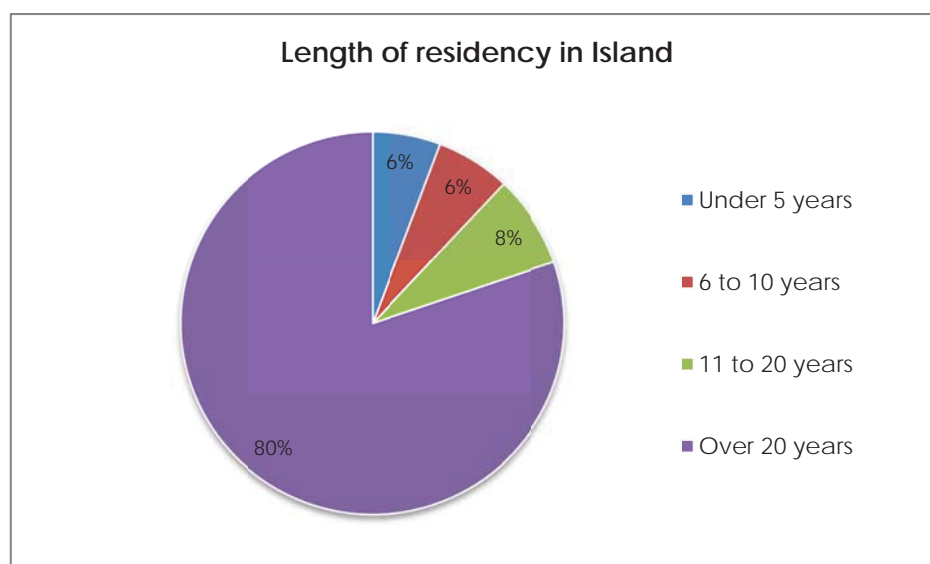


Figure 2

The location of respondent households was as follows (Figure 3). Again this is very similar to the 2012 survey sample and to the population distribution as a whole.

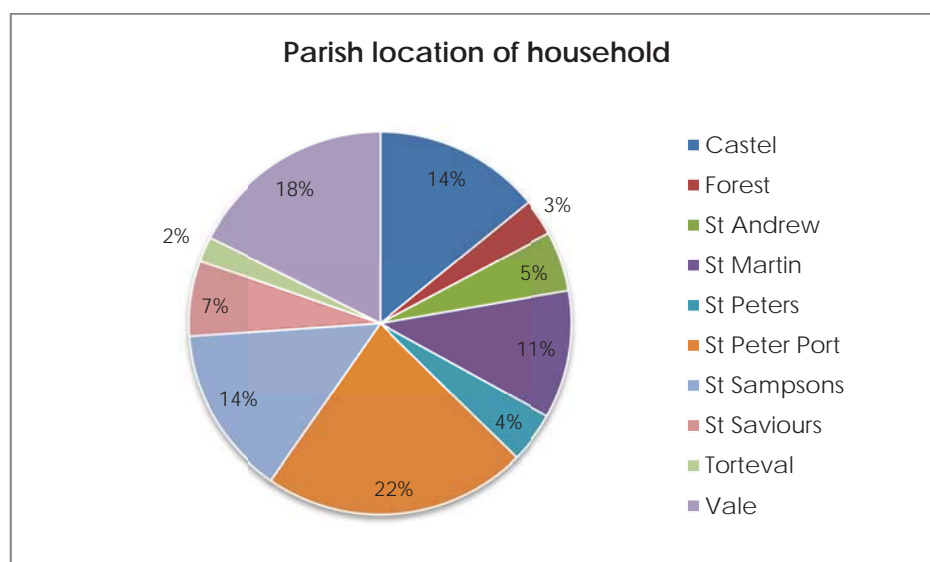


Figure 3

One of the very important aspects of this research is the size of the households taking part in the survey in terms of dairy product consumption and range of product. The 2013 household size distribution was virtually identical to the 2012 results (Figures 4 and 5).

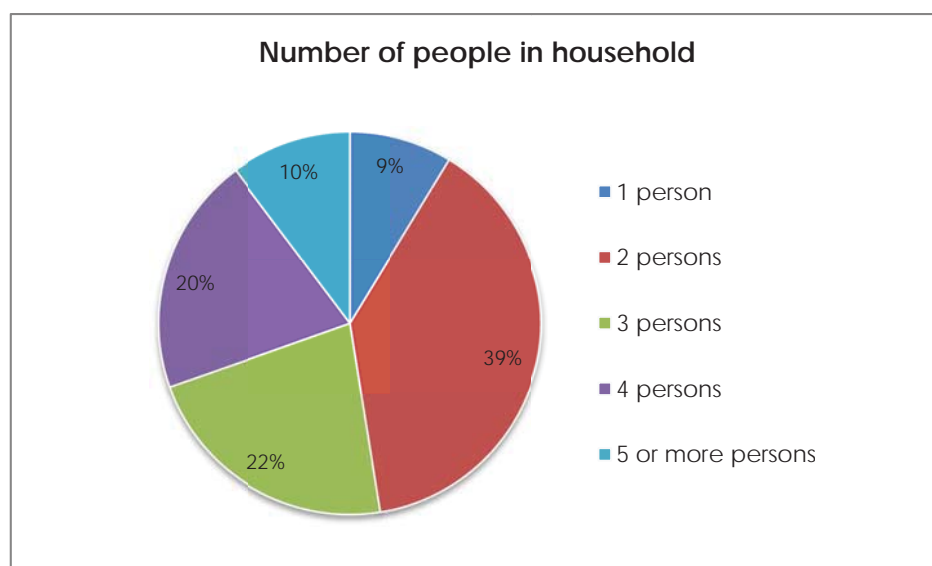


Figure 4

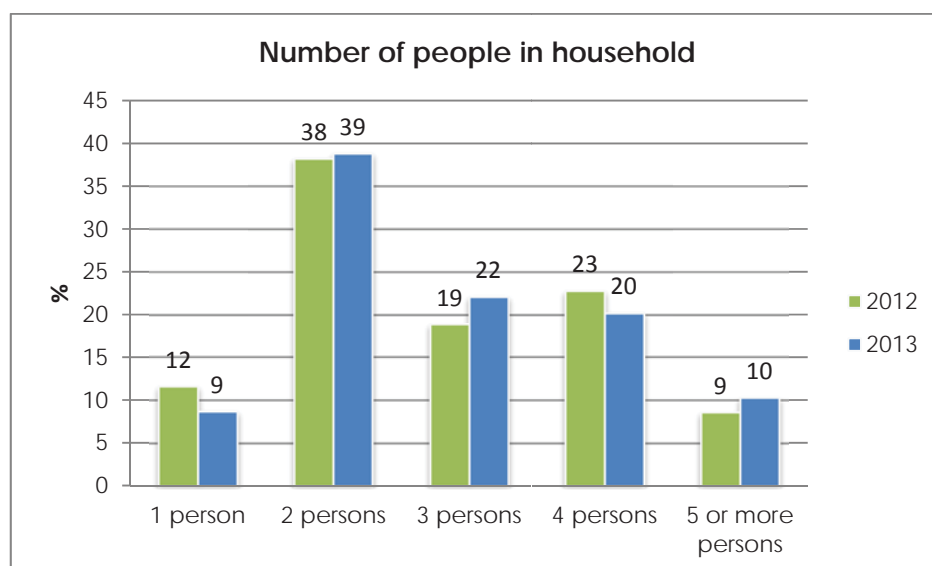


Figure 5

## Findings

### Guernsey Dairy Products Consumed

A range of Guernsey Dairy products were consumed on a regular basis. Figures 6 and 7 show that 71% of respondent households (65% in 2012) consumed low fat milk on a regular basis as opposed to just under 18% consuming full cream milk (19% in 2012). There was an increase in the number of households consuming Guernsey cream and butter in 2013 as compared with 2012. It should be stressed, however, that these percentages are not representing volume of sales and a household may also consume different types of milk on a regular basis.

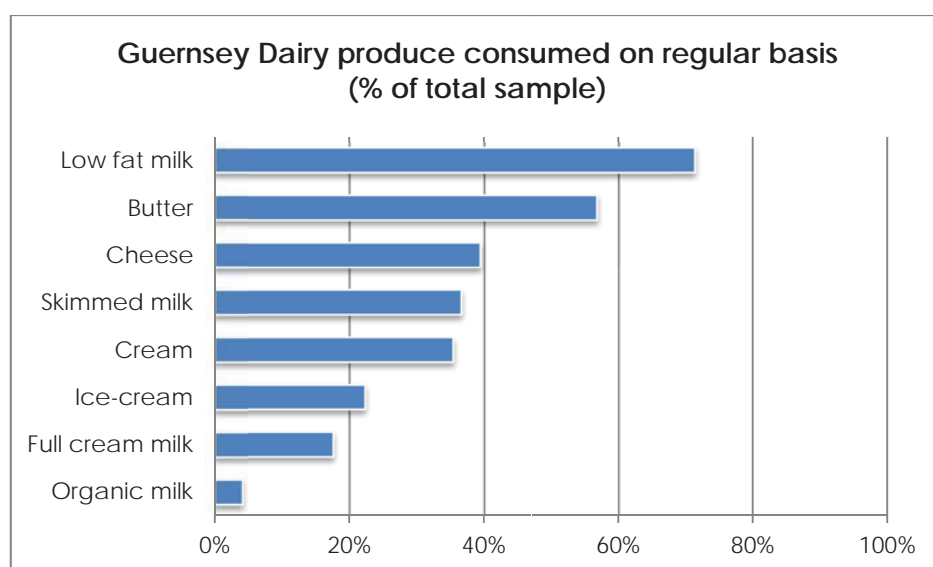


Figure 6

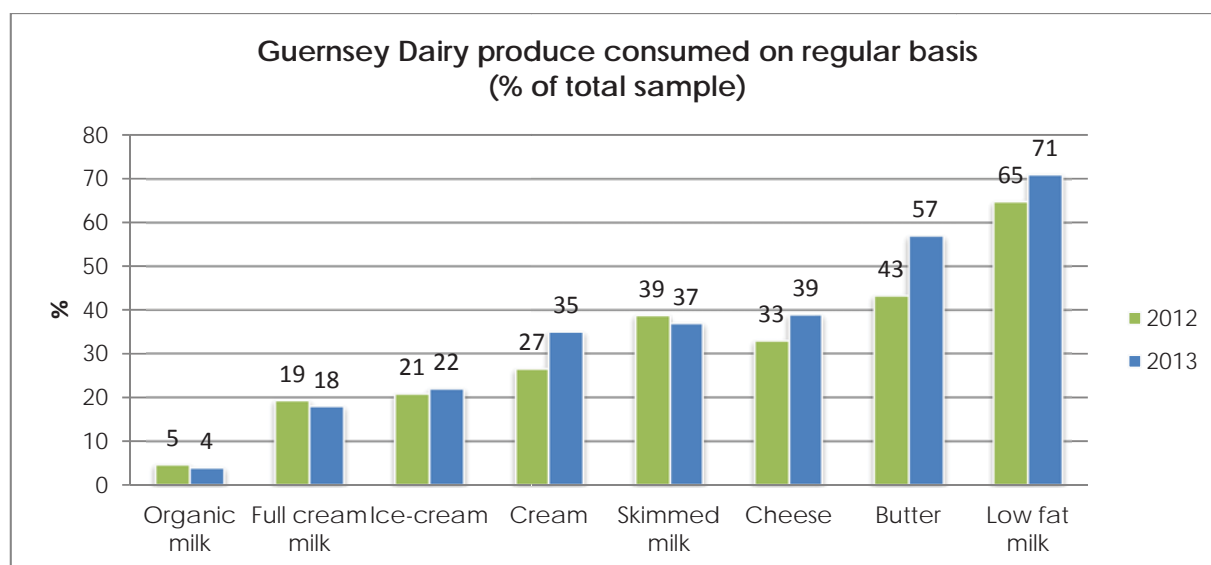


Figure 7

As in 2012, just over half (54%) of those questioned indicated that their household consumed between 0.5 and 5 litres of milk per week with a further third (36%) consuming between 5.5 and 10 litres per week (Figures 8 and 9).

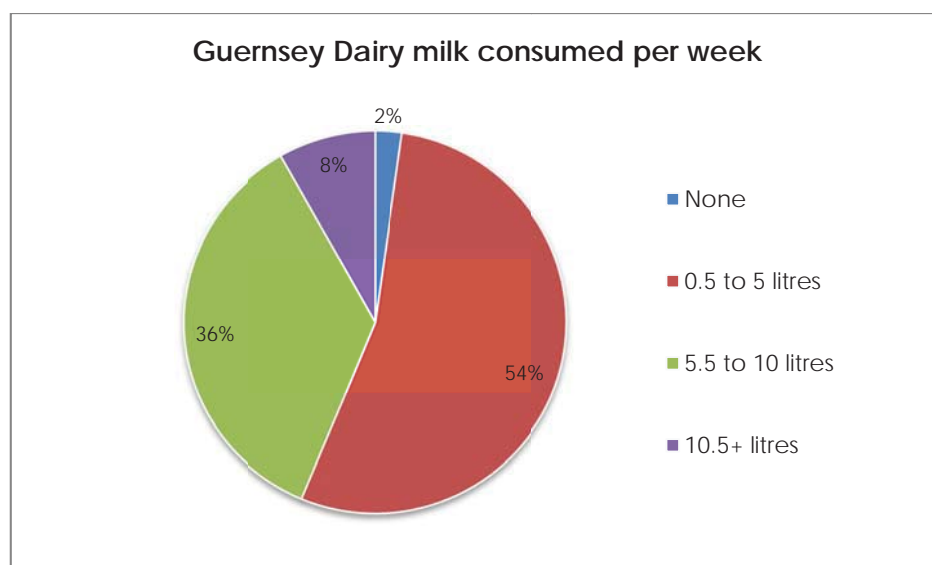


Figure 8

While results were very similar between 2013 and 2012, there were slightly fewer households (8% as compared to 11% in 2012) consuming 10.5 litres of milk or more on a weekly basis.

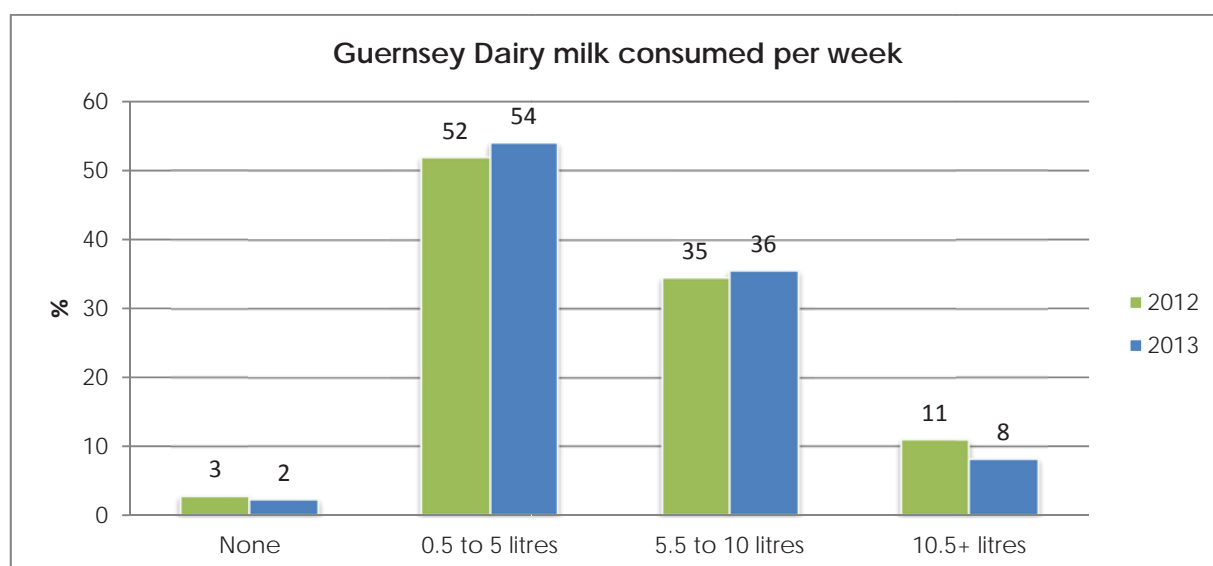


Figure 9

Figures 10 and 11 highlight that the majority of households have not seen a change in their Guernsey milk consumption over the last five years. This majority, however, has dropped from 64% in 2012 to 60% of respondents in 2013. Also, the percentage of respondents who indicated an increase has moved from 18% in 2012 to 24% in 2013.

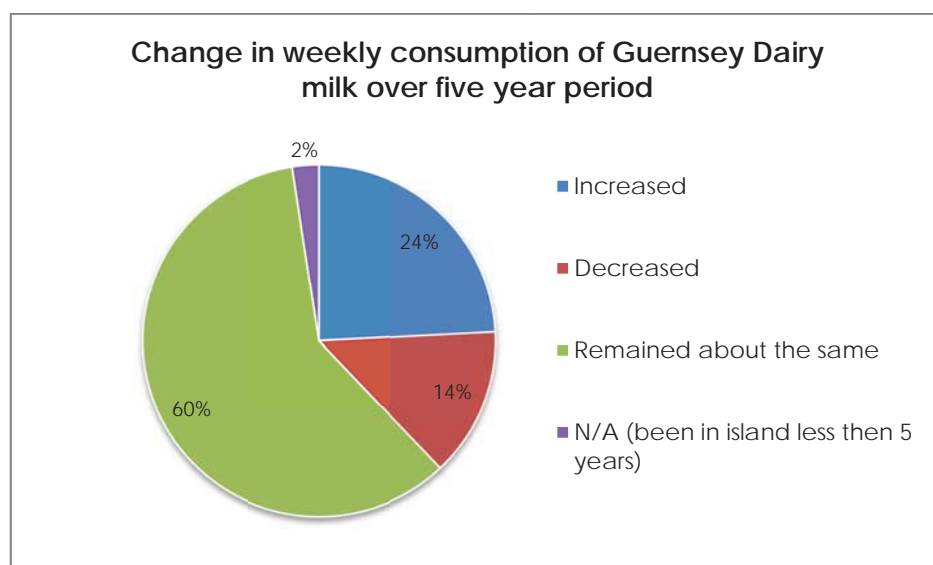


Figure 10

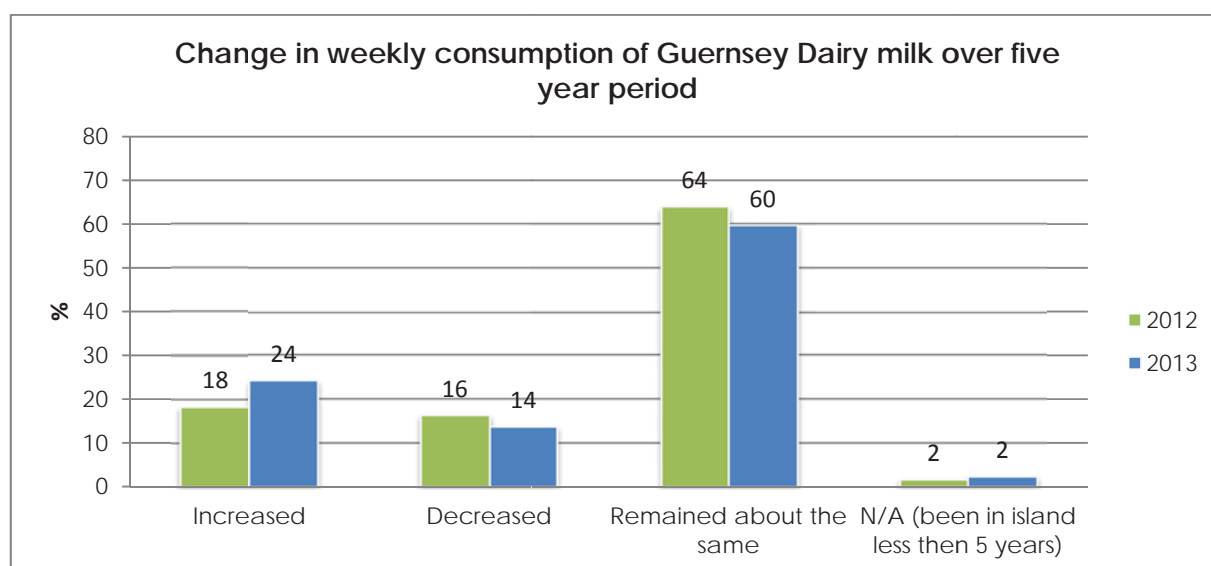


Figure 11

## Local Milk Deliveries

75% of respondents stated that they did not have milk delivered to their household while the remainder (25%) did have milk delivered to their home on a regular basis. In 2012, 63% of respondents stated that they did not have milk delivered to their household while the remainder (37%) did have milk delivered (Figure 12). Reasons why households did not have milk delivered can be found in Figure 13 with the overwhelming reason given by 72% respondents as being 'it was just as easy to buy milk as and when they went shopping'. It should be noted that respondents answering this question represented 75% of the overall sample and that they could give more than one reason.

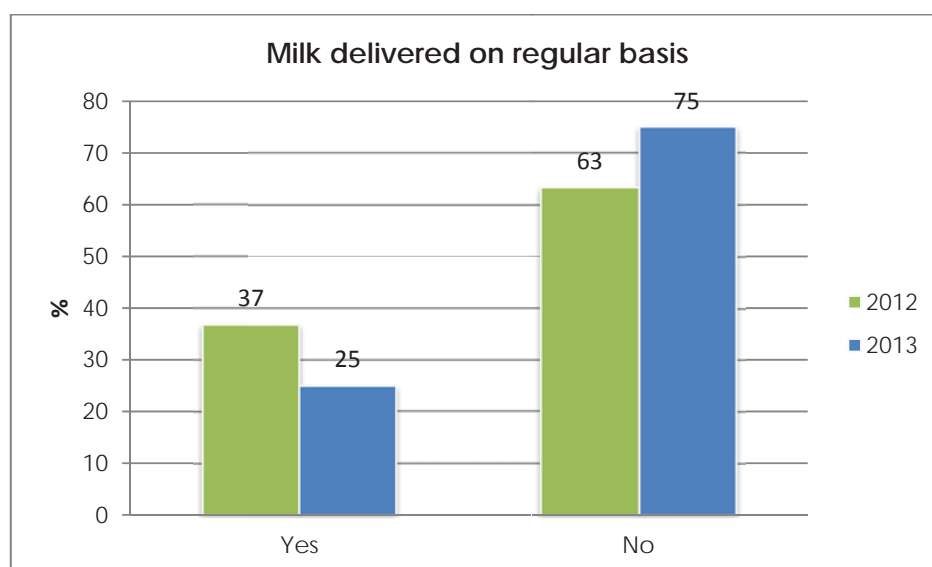


Figure 12

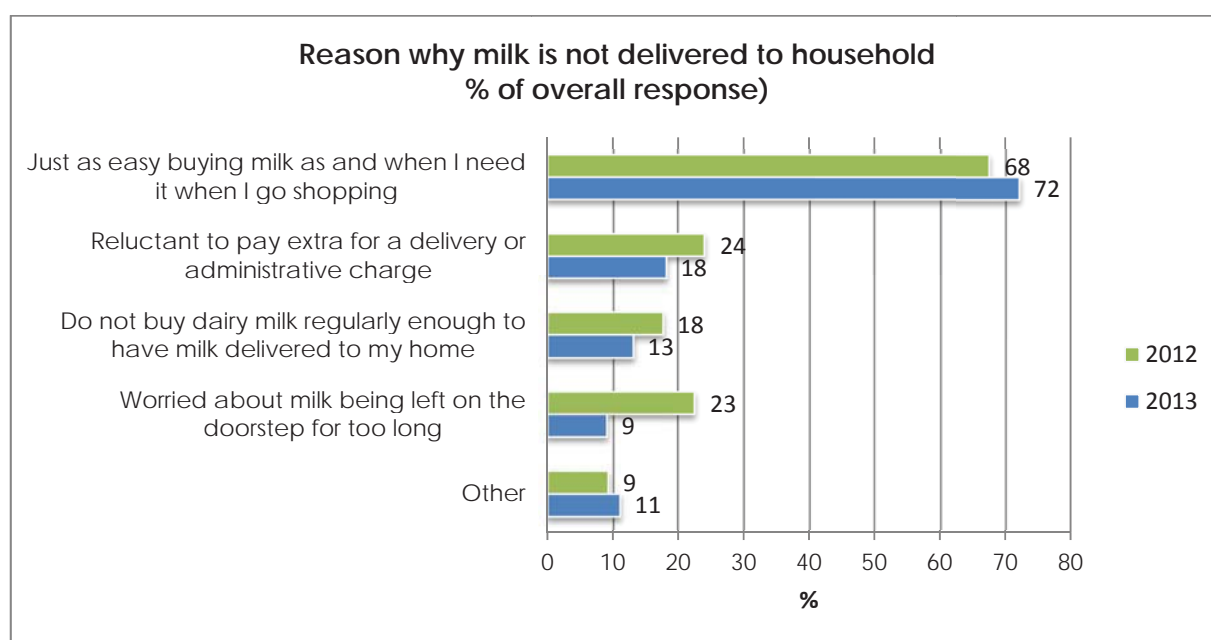


Figure 13

Other (unedited) responses to this question were as follows:

- Concern about freshness of delivered product.
- Currently in short term accommodation - usually have milk delivered.
- Didn't know I could.
- Didn't know it was an option.
- Didn't realize they delivered.
- Do not buy any dairy milk.
- Do not know who delivers.
- Do not use fresh milk.
- Don't consume milk.
- Don't know who delivers in my area.
- Don't like the 'rounds man' attitude.
- Don't buy Guernsey milk, buy Waitrose goat's milk.
- Had an argument with the milkman.
- Haven't got round to arranging it.
- I don't use the same amount daily so buy when I need it.
- I've never seen a milkman on our clos.
- It is not necessary to have doorstep deliveries; it costs the island too much.
- Lactose Free so have Soya Milk.
- Last time I looked into it, the milkman couldn't deliver at suitable times.
- Live across the road from a Co-op.
- Live next door to Co-op.
- Live next to a shop.
- Live next to the Co-op.
- Live right by Co-op store.
- Milkman changed and the new one wouldn't deliver mineral water (unlike the old one).
- Milkman here refuses to deliver organic milk.
- Milkman retired and didn't bother to get another.
- Never been contacted by milkman.
- Never considered it.
- Never thought about having it delivered.
- Only buy Guernsey milk when UK not available.
- Reduced household, was 3 now 1.
- Used to be a milk retailer, now buy from Forest Stores.

- Was not aware you delivered.
- Brought in for craft evenings.
- Difficulty of delivery to apartment.
- Don't know who my milk delivery man is.
- Don't like the milk lady.
- I work in a grocery retailer.
- I'm next door to Waitrose.
- I live in a flat - communal hallway.
- One person lactose intolerant.
- Vegan, do not buy dairy.
- Do not agree that the milkmen make more profit per litre than the shops that have higher overheads. A true and quite disgusting fact.
- Never see a delivery person in my area (Beaucette) so it never occurred to me to have it delivered.
- We used to but the distributor had a poor billing system so we had to pay for 3 months at a time which is expensive. Easier on the pocket to pay as you go.



## Guernsey Milk Production on the Island

82% of respondent households (72% in 2012) were 'very strongly' and 10% (20% in 2012) were 'strongly' of the opinion that Guernsey milk should continue to be produced on the Island (Figures 14 and 15). This is a significant strengthening of opinion between 2013 and 2012.

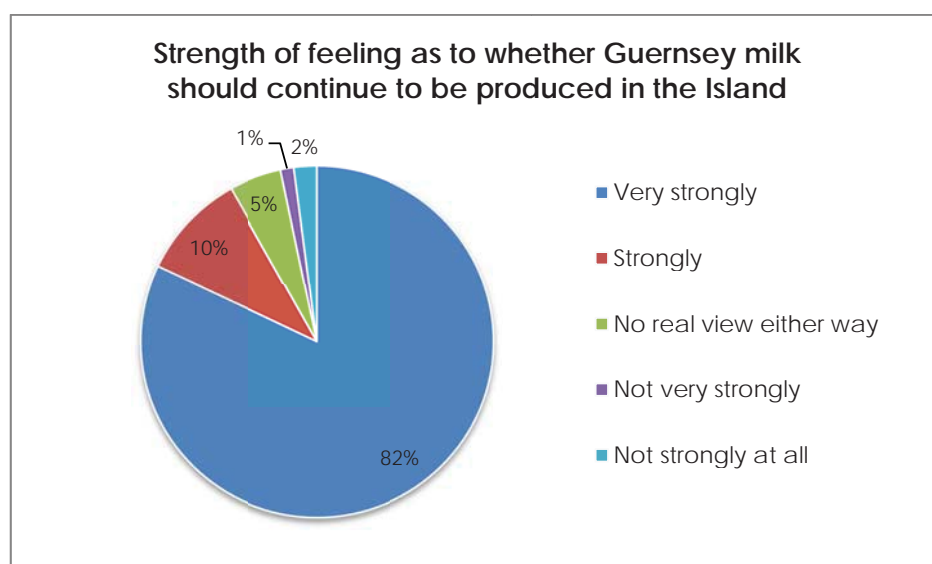


Figure 14

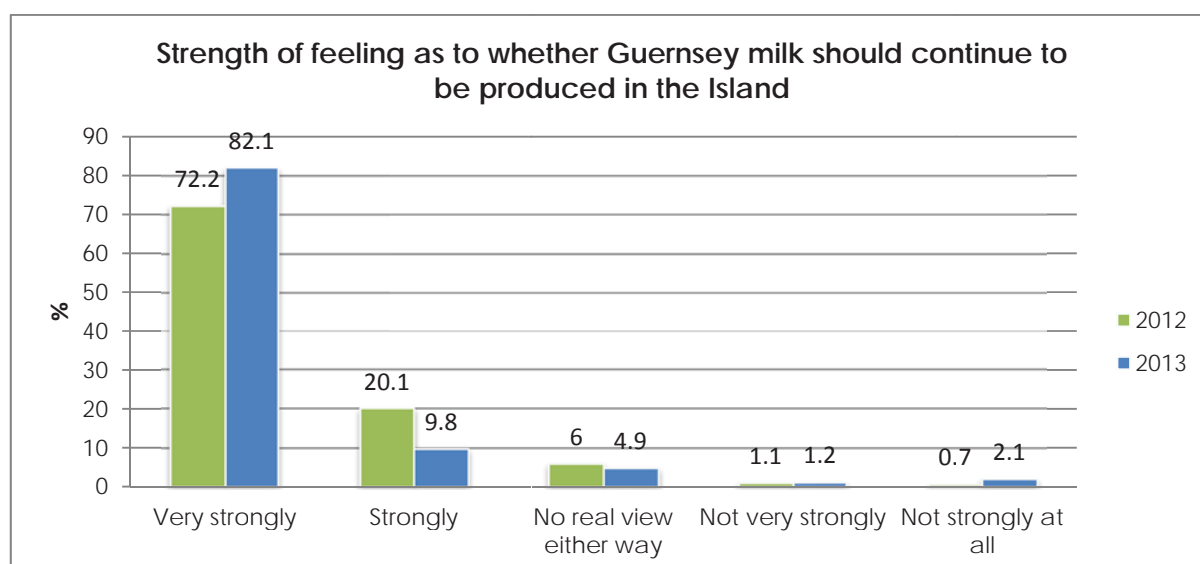


Figure 15

In terms of the number of dairy farmers currently operating in the Island, 40% of respondents (37% in 2012) were of the opinion that there were under ten while a further 44% (37% in 2012) thought there were between 11 and 20 (Figures 16 and 17).

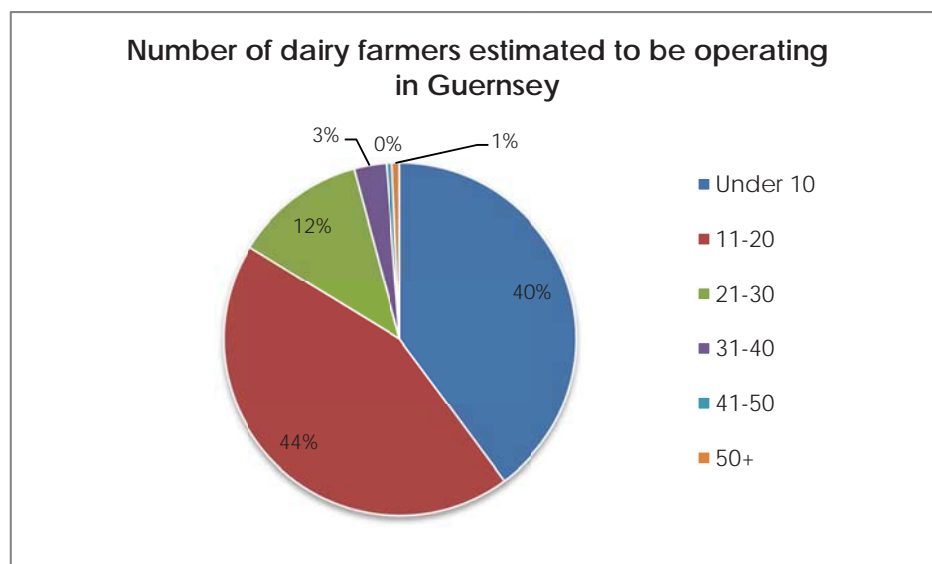


Figure 16

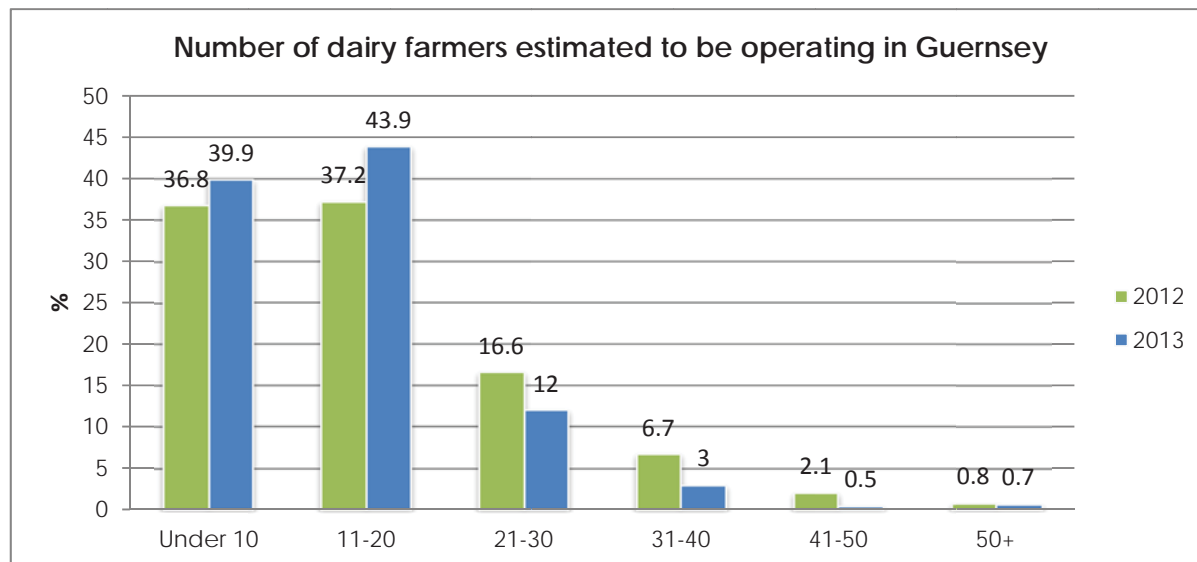


Figure 17

## Strength of Opinion on a Number of Statements

All respondents were asked how strongly they agreed or disagreed with a series of statements about Guernsey milk production. The following are the results from these questions (Figures 18 to 33). It should be noted that unlike 2012, there was a small percentage who 'strongly disagreed' or 'disagreed' with the statements.

As far as being self-sufficient in the production of local milk and dairy products in the future, particularly in terms of future food security, 71% (64% in 2012) 'strongly agreed' with this statement (Figures 18 and 19). 17% 'agreed' with statement as compared with 26% in 2012.

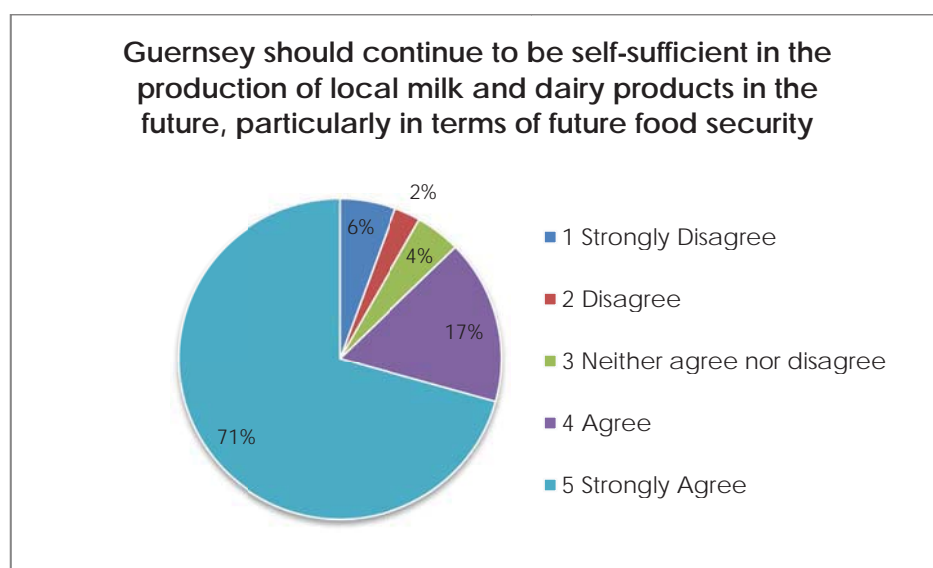


Figure 18

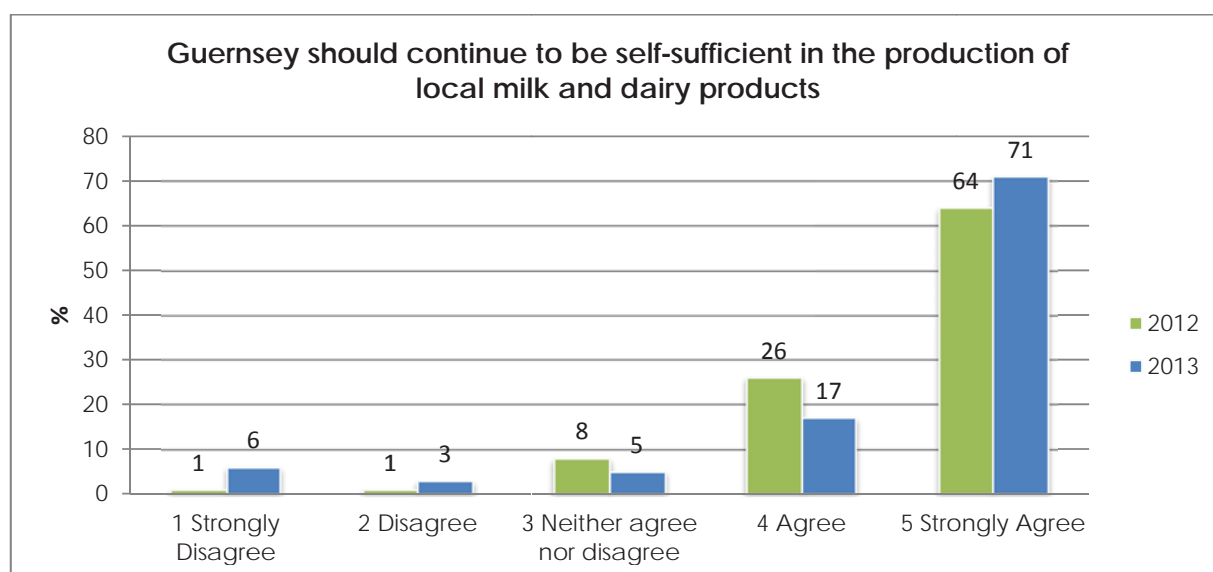


Figure 19

In 2012, respondents were asked how strongly they agreed with the statement that allowing imported milk in would lead to the contraction of the island's dairy industry and the loss of local jobs. As milk is now being imported into the Island, the statement was changed slightly for the 2013 survey to reflect this.

Figures 20 and 21 illustrate that the percentage of respondents 'strongly agreeing' with the statement had dropped from 57% in 2012 to 46% in 2013. This may indicate that, in practice, the importation of milk was perceived not to be adversely impacting on local jobs as much as was thought.

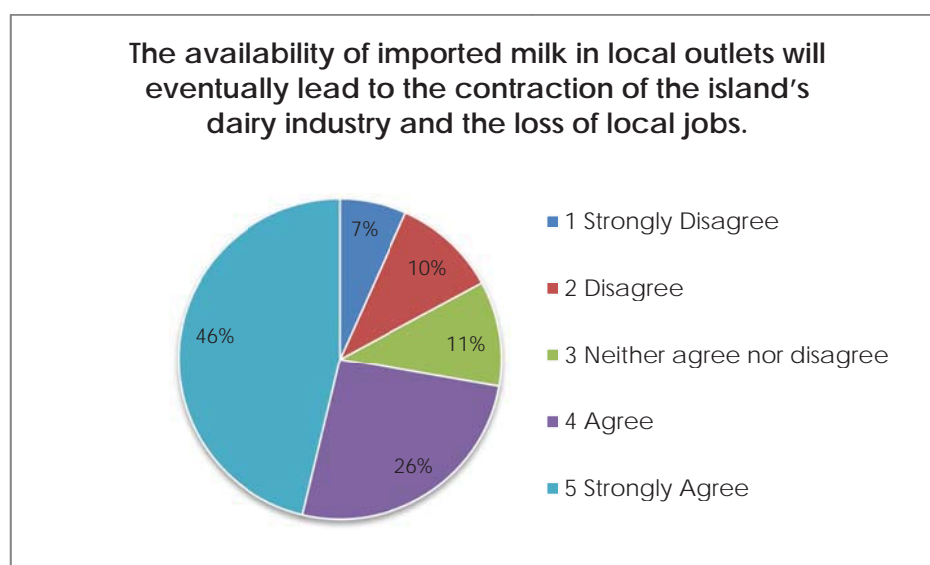


Figure 20

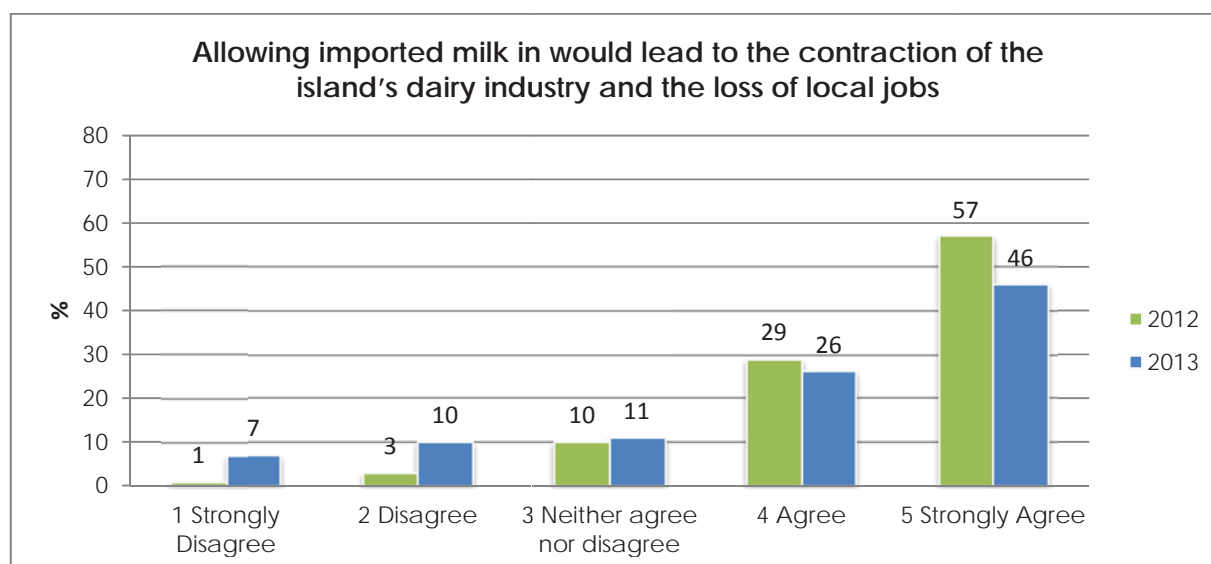


Figure 21

There was a strengthening of opinion that buying locally produced milk was essential to the maintenance of the Guernsey dairy cattle breed. 67% as compared with 61% in 2012 'strongly agreed' with this statement (Figure 22 and 23). 20% 'agreed' with statement as compared with 27% in 2012.

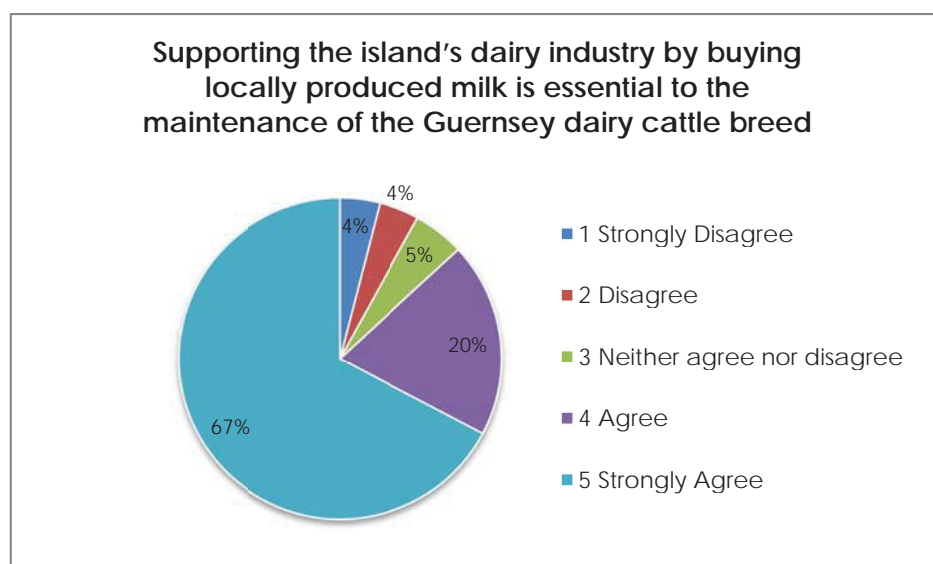


Figure 22

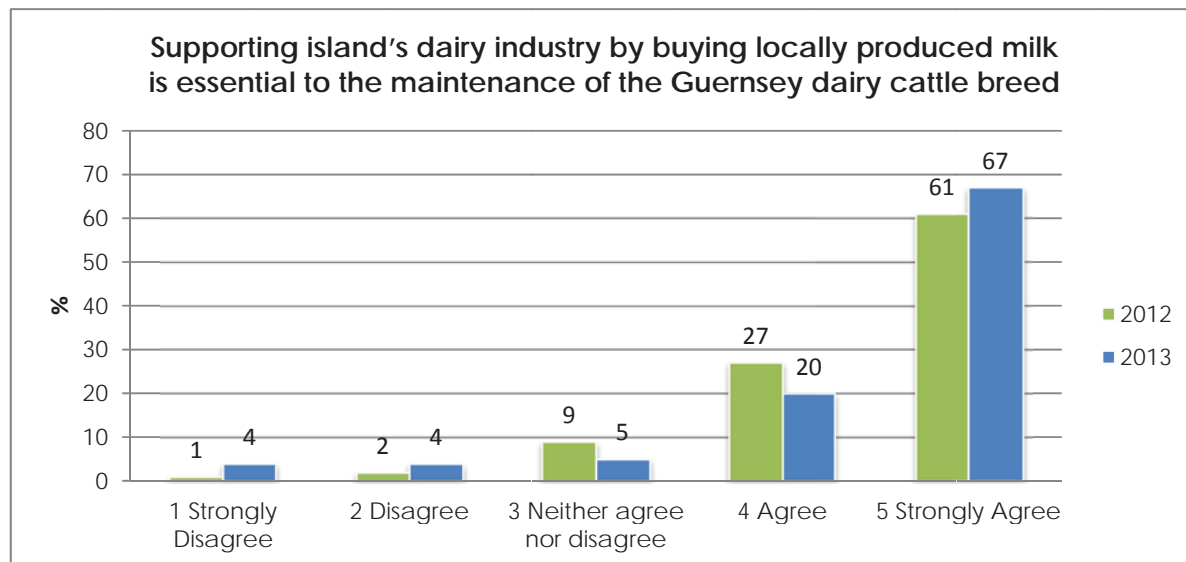


Figure 23

In terms of the statement that supporting the island's dairy industry by buying locally produced milk is essential to the maintenance of the Island's traditional, and familiar, rural landscape, 63% as compared with 55% in 2012 'strongly agreed' (Figures 24 and 25). 20% 'agreed' with statement as compared with 29% in 2012.

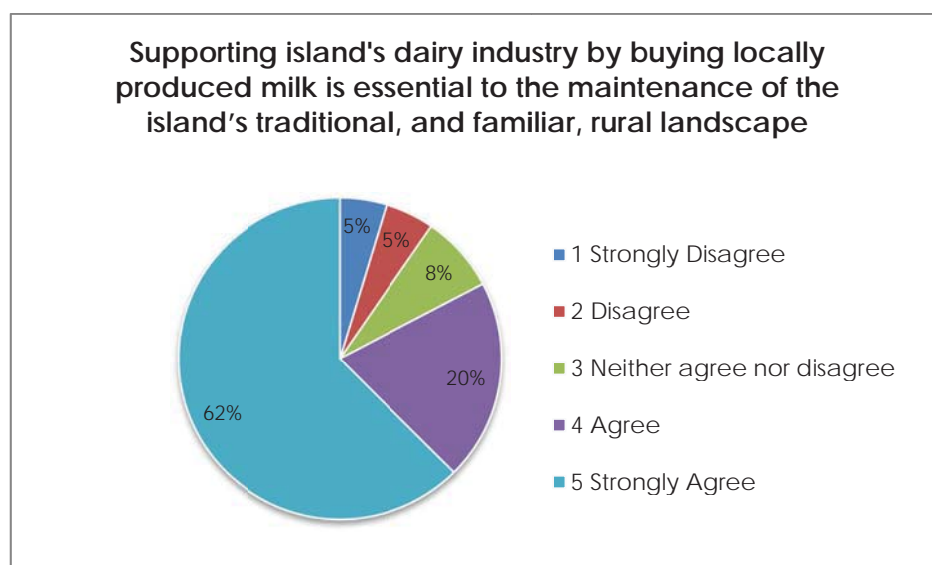


Figure 24

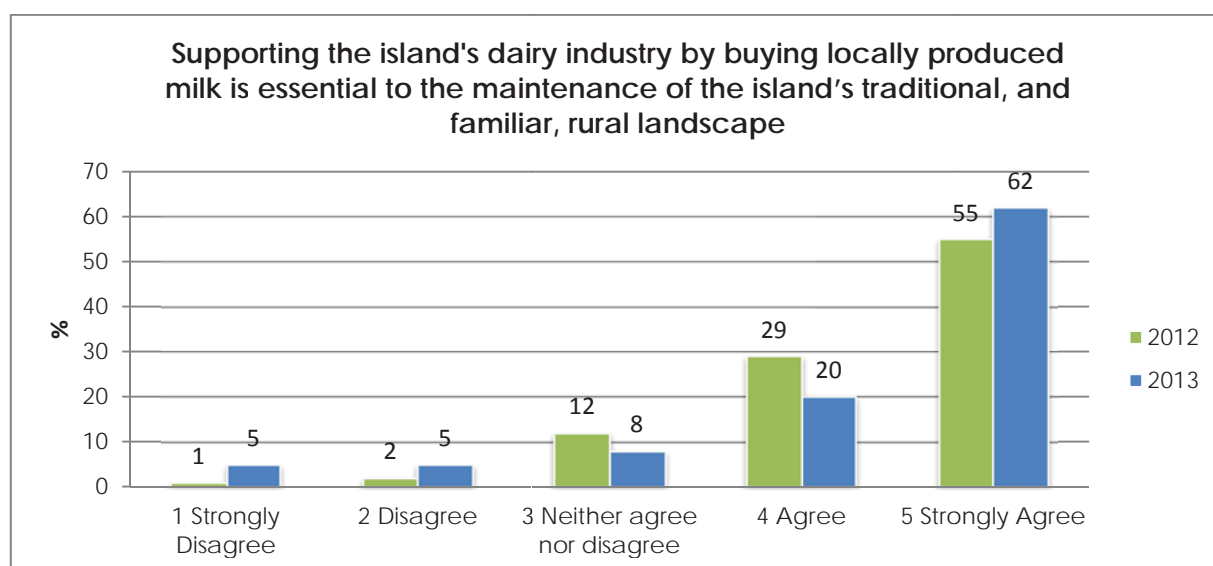


Figure 25

As far as the statement that the quality of Guernsey Dairy milk is excellent and represented good value for money goes, 60% of respondents (as compared with 51% in 2012) 'strongly agreed' (Figures 26 and 27). 22% 'agreed' with statement as compared with 33% in 2012.

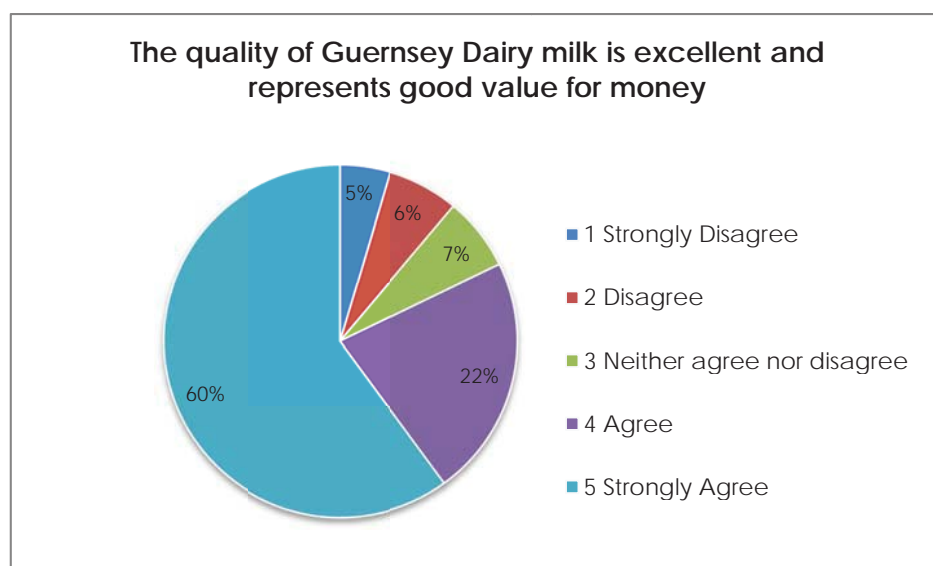


Figure 26

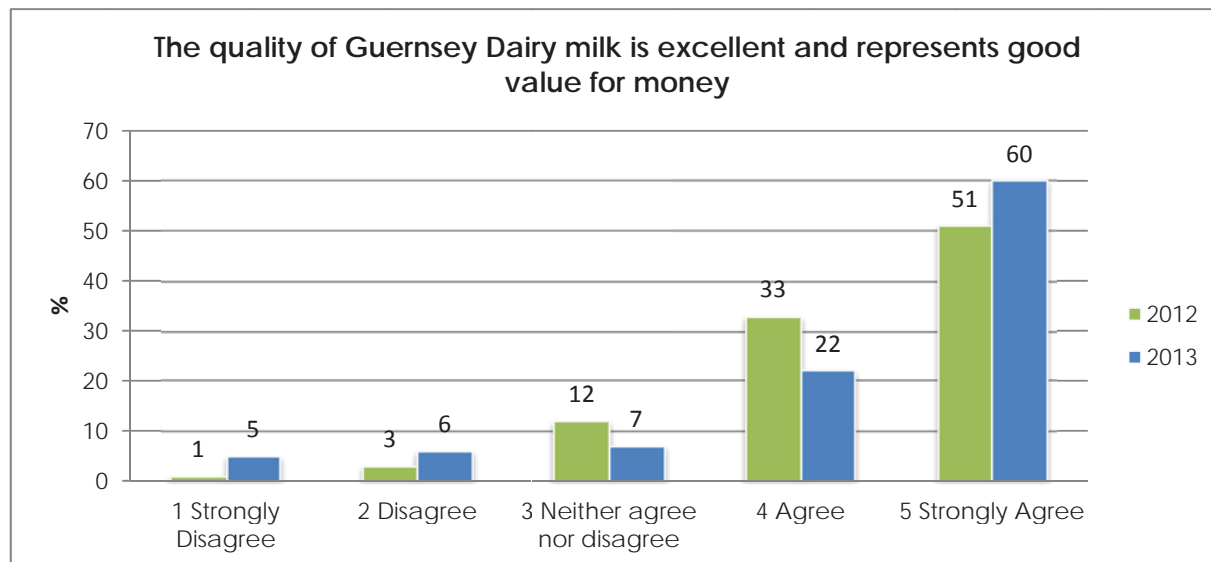


Figure 27

In 2012 respondents were asked whether or not they agreed with the statement:

*'Even if imported milk was available in Guernsey shops, I would pay a premium for Guernsey Dairy milk.'*

In 2013, this statement was changed to reflect that imported milk was now available in the Island. 63% of respondents 'strongly agreed' and 18% 'agreed' with the statement. This compares with 45% and 34% respectively in 2012 (Figures 28 and 29)

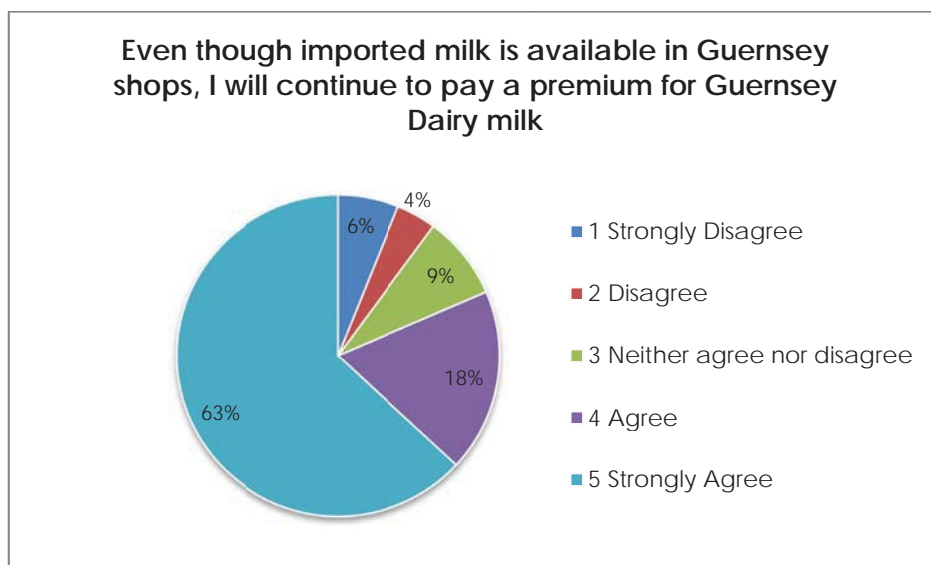


Figure 28

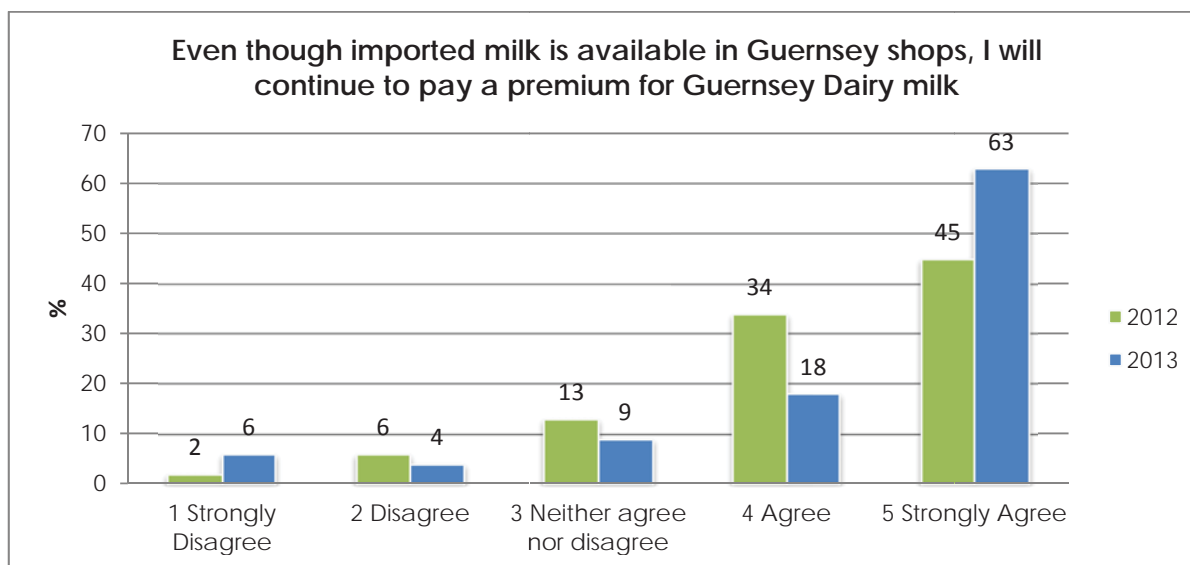


Figure 29



As far as the statement that 'locally produced milk should be priced competitively with UK milk even if this means a subsidy from me, the Taxpayer', very similar range of opinions were recorded in 2013 as in 2012 (Figures 30 and 31).

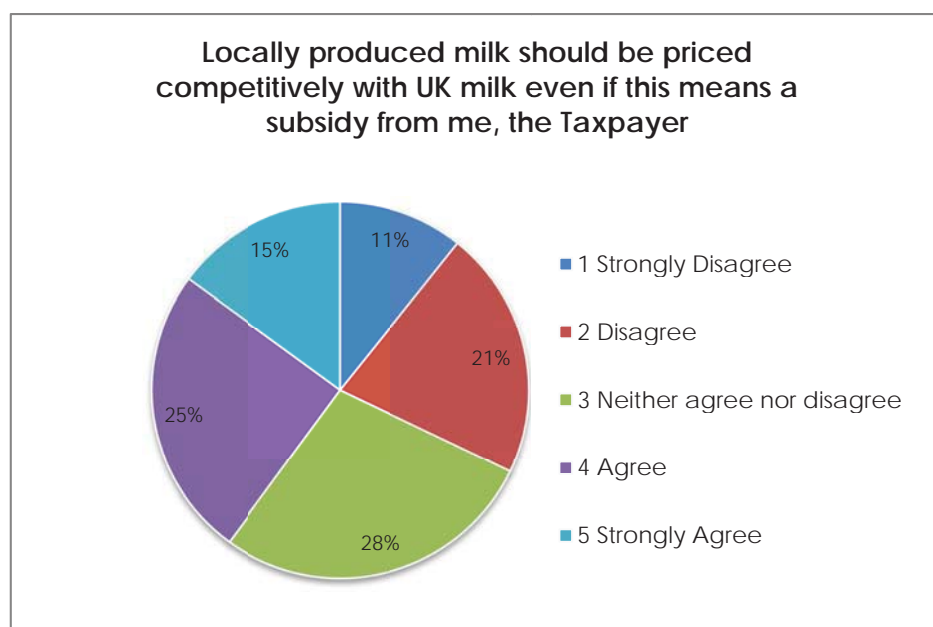


Figure 30

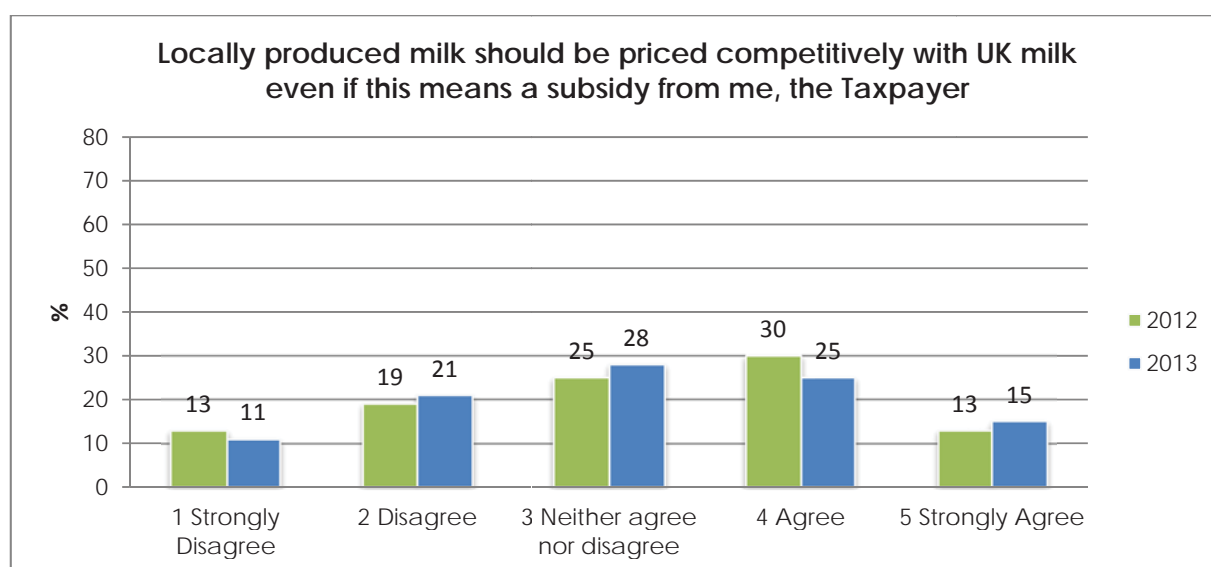


Figure 31

While Figures 32 and 33 illustrate a fairly mixed opinion about the effective promotion of local dairy products in the Island, there was a slight strengthening of opinion that promotion was effective.

45% (as compared with 43% in 2012) 'strongly agreed' or 'agreed' while 23% (as compared with 26% in 2012) 'disagreed' or 'strongly disagreed'.

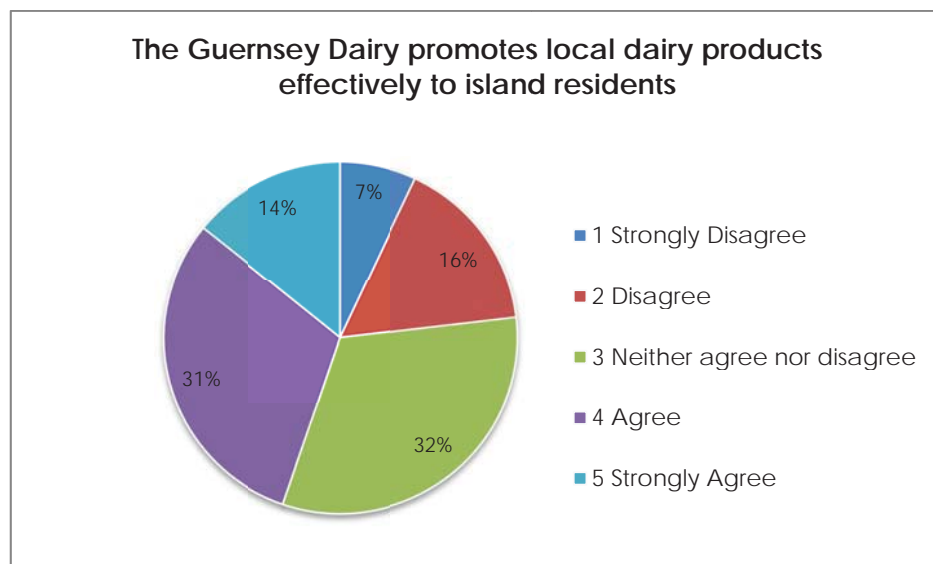


Figure 32

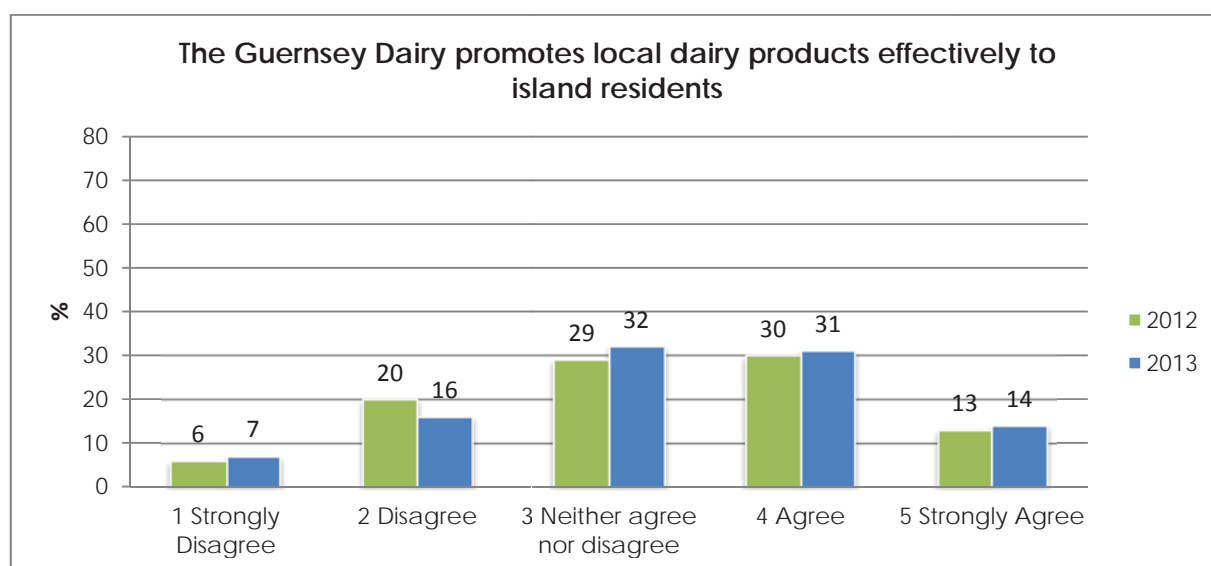


Figure 33

One in three respondents stated that they were 'aware' or 'very aware' of the Guernsey Dairy Industry's recent promotions, one in three said that they were 'not very aware' while one in three were 'not aware' at all (Figure 34).

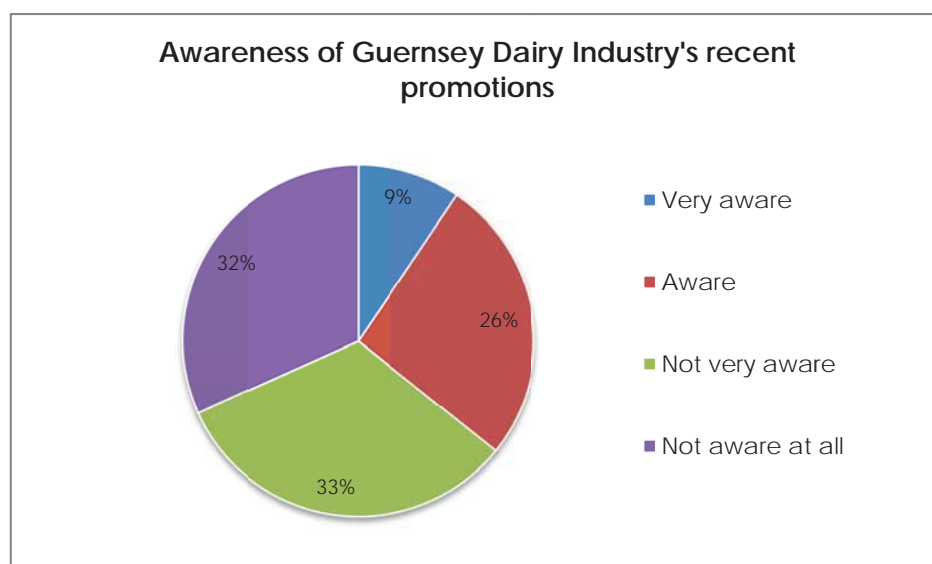


Figure 34

Two out of three respondents were 'strongly' or 'very strongly' of the view that the history of the Guernsey Breed should be promoted (Figure 35). On this point, in a survey undertaken some time ago, visitors to the island were surprised that there was no interpretation centre in the island illustrating the history of the Guernsey Breed and selling Dairy products.

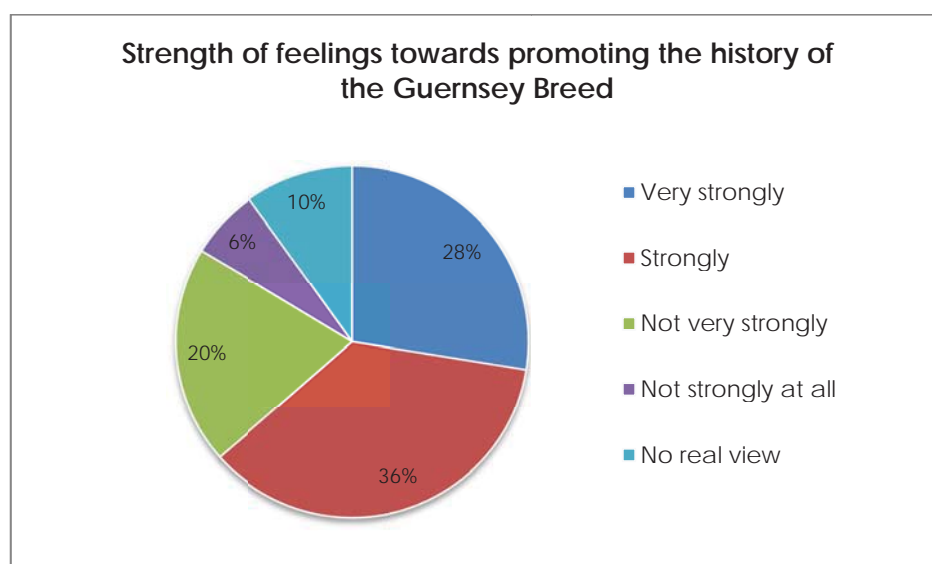


Figure 35

November 2013

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**DAIRY FARM MANAGEMENT CONTRACT 2014**

**THIS AGREEMENT** is between the **STATES OF GUERNSEY**, acting by and through the **COMMERCE AND EMPLOYMENT DEPARTMENT** (“the Department”) and «Name», «Address1», «Address2»«Parish», «Post\_Code» “the Company”.

**It is agreed as follows:**

**1. Dairy Farm Management**

The Company shall comply with all of the requirements, and manage the farmed land (as specified in Appendix E) in accordance with the provisions, of Appendices A to D.

**2. Dairy Farm Management Payment**

2.1 Subject to section 1, the Department shall pay the Company a Dairy Farm Management Payment as follows:

- a) the payment shall be made monthly and the calculator shall be the volume of milk delivered to the Dairy by the Company in the preceding month that is tested and passed as fit for use by the Dairy up to a maximum of the quota for the relevant month specified in the Milk Supply Contract specified in Appendix A; and
- b) in 2014 the payment for work specified in Appendix B shall be 25p multiplied by the volume of milk specified in sub-section a).

2.2 The amounts specified in section 2.1:

- a) may be varied by the Department if the States of Deliberation resolves to amend the sum voted to the Department for Dairy Farm Management Payments; or
- b) may be varied in accordance with the provisions of sections 5 and 12.

**3. Land covered by this Agreement**

This Agreement shall apply to the land farmed by the Company whether it is owned by the Company, leased to the Company or in any other manner made available to the Company (“the farmed land”). The area of the farmed land is shown in Appendix E.

**4. Disposal of Farmed Land**

The Company must notify the Department in writing within 14 days of any disposal of any part of the farmed land, and “disposal” includes a sale or other conveyance, a termination of a lease or any other circumstance or arrangement whereby the farmed land ceases to be available to the Company, in each case whether or not at the instance of the Company.

**5. Disposal of more than 10% of the Farmed Land**

In the event of a disposal of more than 10% of the farmed land the amount payable to the Company under the provisions of this Agreement may be reviewed by the Department to determine whether circumstances justify a reduction in payments.

**6. Disagreement concerning the reduction of the Farmed Land**

In the event of any disagreement between the Company and the Department concerning the size of the reduction of the area of the farmed land brought about by any disposal of the land, the Company and the Department agree that a Chartered Surveyor shall be appointed by the Department for the purpose of determining the size of such reduction and the parties agree to be bound by the determination of the Chartered Surveyor appointed under this clause.

**7. Professional Charges**

The professional charges of the Chartered Surveyor appointed under clause 6 shall be divided equally between the Department and the Company.

**8. Notification of Acquired Land**

The Company must notify the Department in writing within 14 days of any acquisition of any land and any such land so acquired may, with the agreement of the Department, in writing, be included as part of the farmed land subject to this Agreement.

**9. Access to the Farmed Land**

9.1 The Company shall allow any person authorised by the Department (an “authorised person”) access to the farmed land for the purpose of inspecting the farmed land, farm buildings, livestock, fixed facilities and machinery.

9.2 An authorised person may request access to the farmed land on Monday to Friday, excluding Public and Bank holidays, between the hours of 10.00am and 3.30pm or at any time with the prior agreement of the Company. If, however the authorised person has reasonable grounds to believe that there has been a breach of the requirements of this Agreement, access may be requested at any time.

9.3 “Authorised Persons” shall be appointed under the authority of a letter signed by the Minister or Deputy Minister of the Commerce and Employment Department. This letter of authority shall be produced on demand when right of access is claimed under the provisions of this Agreement.

9.4 The Department will authorise a FWAG adviser (as specified in Appendix B), and an inspector to carry out a quality assurance audit (as specified in Appendix D).

**10. Taking of Samples**

An authorised person may take samples of soil, plant material, water, animal food, and manure for the purpose of examination and scientific analysis.

**11. Provision of Records**

11.1 The Company, on request, shall provide the Department or an authorised person with any records that may be required to be maintained under the provisions of any of the Appendices to this Agreement and also provide the Department or an authorised person with any other information which might reasonably be required to assess whether the requirements of this Agreement have been fulfilled.

11.2 Records that are requested by the Department or an authorised person shall be made available at the time of an inspection or delivered to the offices of the Department no later than seven days after the date on which a request for records was made.

**12. Breaches of this Agreement**

12.1 Where the Department is satisfied that there has been a breach of the terms of this Agreement it shall issue a notice, in writing, to the Company stating the nature of the breach, specifying such action that is necessary to correct that breach. The Company shall be given a maximum 28 days in which to implement the requirements of the notice.

12.2 If the conditions of the notice specified in section 12.1 are not met to the satisfaction of the Department within any time period specified in the notice:

- a) the Dairy Farm Management Payment specified in section 2.2 shall be reduced by 50% from such date as the Department shall specify in writing to the Company; and

- b) the Department shall issue the Company a second written notice specifying any action to be carried out by the Company within a maximum of 28 days.
- 12.3 If the conditions of the second notice specified in section 12.2(b) are not met within the period specified in that notice, the Dairy Farm Management Payment specified in section 2.2 shall not be paid to the Company from such date as the Department shall specify in writing to the Company.
- 12.4 The provisions of section 12.3 shall apply for a maximum of six months from the date of the second notice specified in section 12.2(b) after which, if the breach of the Agreement specified in section 12.1 has not been rectified to the satisfaction of the Department, this Agreement shall terminate.

### **13. Termination of the Agreement**

- 13.1 This Agreement may be terminated by:
  - a) the Company by providing one month's notice in writing to the Department.
  - b) the Department by giving six month's notice in writing to the Company.
- 13.2 The Department may terminate this Agreement by giving 28 days notice in writing should the Company be declared insolvent or en désastre or should any of the farmed land owned by the Company be made the subject of a preliminary vesting order.
- 13.3 This Agreement will terminate with immediate effect in the event of:
  - a) the commencement of winding up proceedings against the Company named in this agreement;
  - b) the States of Guernsey either:
    - i) resolving to end the Dairy Farm Management Payment Scheme; or
    - ii) resolving not to provide funds for the Dairy Farm Management Payment Scheme as part of the annual process of determining the budgets of all States Departments;
  - c) the Company ceasing the business of dairy farming;
  - d) in accordance with the provisions of section 12.4.

### **14. Amendments to Appendix E**

- 14.1 Subject to the provisions of sections 4 and 8, where the area of farmed land changes during the term of this Agreement the Department may provide the Company with an amended version of Appendix E which shall state the date on which the amendment shall take effect.

### **15. Term of Agreement**

- 15.1 This Agreement shall have effect from the 1<sup>st</sup> January 2014 until the 31<sup>st</sup> December 2014.

SIGNATURES at this point in document  
SAMPLE COPY ONLY

## APPENDIX A – MILK SUPPLY CONTRACT & QUOTA

- a) The Company shall be party to a Milk Supply Contract with the Department for the term of this Agreement. (Note: The Milk Supply Contract specifies the quota arrangements and amounts applicable to milk supply to the Guernsey Dairy).
- b) Payments under the terms of this Contract (i.e. The Dairy Farm Management Contract) will be calculated on the volume of milk delivered in accordance with section 2 and subject to quota amounts specified in this appendix.

For the purposes of the quota system rules, this contract is in category «syscat».

This is for «catname» with a total contract volume of «catvol» litres.

This category «catdesc».

Details for the currently operative quota system rules are published in the document “Monthly Milk Quota System” published by the Department and agreed in consultation with the GFA.

## APPENDIX B – COUNTRYSIDE MANAGEMENT

### Farm Biodiversity Action Plans

The Company shall implement the work guide contained in the Farm Biodiversity Action Plan for the Farmed Land that has been developed with the Farming and Wildlife Advisory Group (FWAG) experienced adviser working in collaboration with the Company.

The Farm Biodiversity Action Plan forms a part of this Appendix.

The Company shall provide the FWAG adviser and any other persons authorised by the Department under section 9 with any information reasonably required for the conduct of a subsequent countryside management audits of the Farmed Land.

The Department acknowledges that where any of the farmed land is:

- a) Rented by the Company;
- b) Leased by the Company; or
- c) Made available to the Company in any other way,

the prior approval of the owner of such land may have to be obtained to implement any environmental requirements of the contract.

### Good Environmental Practice

The Company must comply with the Basic Environmental Conditions on all land for which they are responsible. These conditions are included in the explanatory booklet entitled “Guernsey Countryside Management Scheme” (revised 2009) which forms part of this Appendix.

### Code of Good Agricultural Practice

The Company shall farm according to the Code of Good Agricultural Practice for the prevention of environmental pollution from agricultural activity (revised 2009) which forms part of this Appendix.

### Stocking Density

The Company shall not exceed a stocking density of 3.05 verges of forage land under his control per livestock unit, without the prior written approval of the Department.

The Department will carry out an audit of stocking density no more frequently than once a quarter and the Company shall provide any information that the Department reasonably requests to complete such an audit.

Definitions to be used in these calculations are:



## Livestock Units

### Bovine Animals

- |  |                      |
|--|----------------------|
| • Animals under 1-year of age                      | 0.34 livestock units |
| • Animals 1-2 years of age                         | 0.65 livestock units |
| • Animals over 2 years but not in the milking herd | 0.80 livestock units |
| • Bulls  | 0.65 livestock units |
| • Steers   | 0.50 livestock units |
| • Milking herd cows                                | 1.0 livestock units  |

Any other livestock that are kept at grass or consume forage grown by the Company will be taken into account in calculations:-

- |                  |                       |
|------------------|-----------------------|
| • Horses         | 1.0 LU                |
| • Sheep and Rams | 0.08 LU               |
| • Lambs          | birth to store weight |
|                  | 0.04 LU               |
|                  | birth to fat          |
|                  | 0.04 LU               |
|                  | birth to hoggets      |
|                  | 0.08 LU               |

### Forage Area

This comprises the area of forage crops (other than catch crops) grown for consumption by cattle on the farm, less any land used exclusively by outdoor pigs or poultry and also the land equivalent in hectares (or verges) of any fodder grown by the Company and fed to intensively reared, non-grazing livestock, such as veal calves and barley beef.

Forage Crops are all crops, grass and rough grazings grown on the farm specifically for grazing livestock, but not crops harvested as grain and pulses.

Note: Cereal crops that are grown and cut for forage (“arable/cereal silage”) and forage maize can be included in the forage area calculations.

The Department is aware that the use of locally grown cereals harvested as grain can result in import substitution for cattle feed cake and straw and it supports such farming methods, nonetheless, these crops do not contribute to forage feeding. Similarly root crops, such as mangels, which essentially replace imported cereals, or concentrate feeds, are not considered to be forage crops.

However an adjustment for cereal straw may be made subject to application on a farm-by-farm basis. The calculation of this adjustment is based on the assumption that a percentage of the straw element of the crop is fed to dairy cattle and thus contributes to the forage element of the diet.

The cereal straw adjustment that will be added to the forage area is 0.2 verges per verge cropped in this way.

No allowance is made for the occasional feeding of potato crop residue to cattle.

It is important to stress that whilst other non-dairy land and crops are excluded from the calculation of Dairy Farm Stocking Density, they are allowed for in the farm waste management plan as they are, when used within the guidelines for slurry spreading, a legitimate site for slurry disposal when this is done using environmentally sensitive farming practices.

## **APPENDIX C - FARM WASTE AND OPERATIONAL MANAGEMENT**

### **Farm Waste (and Manure) Management Plans**

The Company shall have agreed and signed a plan for the management of farm waste on the farmed land. Where that plan includes provision for the installation of farm waste management systems, the Company undertakes to carry out such installation in accordance with any timetable indicated in the plan and to operate in a manner approved by Guernsey Water.

The Company undertakes to implement the provisions of the Manure Management Plan that has been prepared for the farmed land.

Neither plan may be varied without the prior written approval of the Department.

#### **Nutrient Balance**

The Company will participate in the Nutrient Recording Scheme and will:

- a) provide the Department with information on his purchase and use of fertiliser and animal feed during 2014; and
- b) maintain any records required by the Scheme and as specified by the Department during the term of the Agreement.

The Company shall provide any information requested by the Department within 14 days of a request.

#### **Training**

The Company and any staff employed by the Company who are responsible for the mixing or preparation or application of fertilizers and crop protection chemicals, must have a certificate for attendance on a Fertilizers Application Training Scheme (FAcTS) course and the appropriate NPTC certification for the application and use of crop protection chemicals.

#### **Milk Records**

The Farmer will participate in the Milk Recording Scheme. Details of the currently operative rules of the Milk Recording Scheme are published in the document “Milk Recording Service – Conditions and Guidelines” which is published by the Department and agreed in consultation with the GFA.

### **APPENDIX D – MILK QUALITY AND ANIMAL WELFARE ASSURANCE SCHEME**

The Company undertakes to adhere to the provisions of the Milk Quality and Animal Welfare Assurance Scheme which forms a part of this Appendix.

The Department will appoint an inspector to carry out a quality assurance audit on the Company's farm during the term of the contract. The Company shall provide the inspector with any information or assistance necessary to carry out the audit.

The inspector will produce a written report of his findings and recommendations for the Department and the Company.

Copies of a checklist of the audit findings will be supplied to the Company at the time of the visit.

The Company shall implement any action that is required in the report and recommendations of the inspector in accordance with a timetable specified by the Department (following consultation with the Company).

#### **Training**

The Company and any staff employed by the Company who administer veterinary medicines shall have attended a training course covering the correct, safe, and humane use of such materials.

### **APPENDIX E - FARMED LAND**

The land shown on the attached map or maps shall be the farmed land covered by this Agreement.

During the term of this Agreement the Department shall provide the Company with a draft map or set of maps of the farmed land and the Company shall, within such period as the Department may specify:

- a) confirm that the land indicated on the map or maps is the farmed land for the purposes of this Agreement; or
- b) advise the Department of any additions or deletions to the land indicated on the map or maps.

Failure to comply with the above requirement within the time period specified by the Department shall be a breach of the Agreement.

## GUERNSEY DAIRY INDUSTRY: TRENDS IN BUSINESS PERFORMANCE

### Dr Andrew Casebow

Guernsey's dairy farm businesses provide their owners with a very worthwhile occupation and an outdoor and independent lifestyle, but require huge commitment in capital investment and working hours. In recent years there has been a strong trend towards larger farms. This is a continuing trend, not only within Guernsey, but also in the UK and throughout the world.

Dairy farms in the island still remain considerably smaller than their counterparts in the UK (or indeed in Jersey) and this is unlikely to change due to the size of the island, the small field sizes and the fragmented land ownership.

### 1. A snapshot of farming in Guernsey 60 years ago

Dairy farming has made huge technical progress. Sixty years ago, in 1953, 12,811 verges (almost 84% of all agricultural land in the island) was used by dairy farmers. At that time there were 2,179 dairy cows in the island herd, producing an average of 2,522 litres of milk per cow each year, which is less than half the production of modern Guernsey cattle in the island.

In 1953 there were 349 dairy farm holdings but:

- a. Many of these were very small, 'part-time' smallholder farms.
- b. The average farm holding only kept 6 cows and most milking was undertaken by hand.
- c. Almost a third of these farm holdings kept fewer than 3 cows and used less than 20 verges (8 acres) of land.
- d. Only 10 farms had more than 15 cows or used more than 90 verges (36 acres) of land.
- e. In total 5,495,615 litres of milk were produced and sold to the States Dairy in 1953 (compared with 7,972,433 litres of milk in 2013).
- f. Farms grew most of the feed required for the dairy cows throughout the year; growing cereals, kale and root crops as well as grass. Little extra feed would have been imported.
- g. On average, almost 6 verges of land were required to provide sufficient locally grown food for each cow.
- h. Most cows were tethered in the fields during the summer months and tethered in stalls in traditional stables during the winter months. A considerable number had no winter housing.

### 2. Farming in Guernsey in 2014

The situation in 2014 is very different to the picture outlined above. In recent years there have been 18 commercial dairy farms in Guernsey, which have maintained an average of about 80 cows per farm. However, in the past year three farmers have retired, two of which have retired for medical reasons. As most of the cows have been taken on by other farms this has meant that the average size of the remaining herds has increased. This is likely to improve efficiency in the herds that remain.

Guernsey dairy cows also produce much more milk each year than in the past. Local Guernsey herds produced an average of almost 6,000 litres of high quality milk for every recorded cow in the herd in 2012/13.

By comparison the average production of recorded Holstein dairy herds in England was 8,390 litres for the same 2012/13 year. Although Guernsey cows produce less milk than 'black and white' Holstein cows, the quantity of protein and butterfat in the milk and the colour and the taste of Guernsey milk is far superior.

**Table 1: Showing the Average Milk Yield, Butterfat and Protein in Island Guernsey cows compared with English Holstein Herds.**

Breed	No. of cow lactations recorded	Milk Yield in Kg / milk	Butterfat %	Protein %	Total weight butterfat and protein (Kg)
Holstein	397,638	8390	3.94	3.17	597
Island Guernsey	1,172	5958	5.18	3.49	608

Breed average results, NMR Annual Production Report 2013.

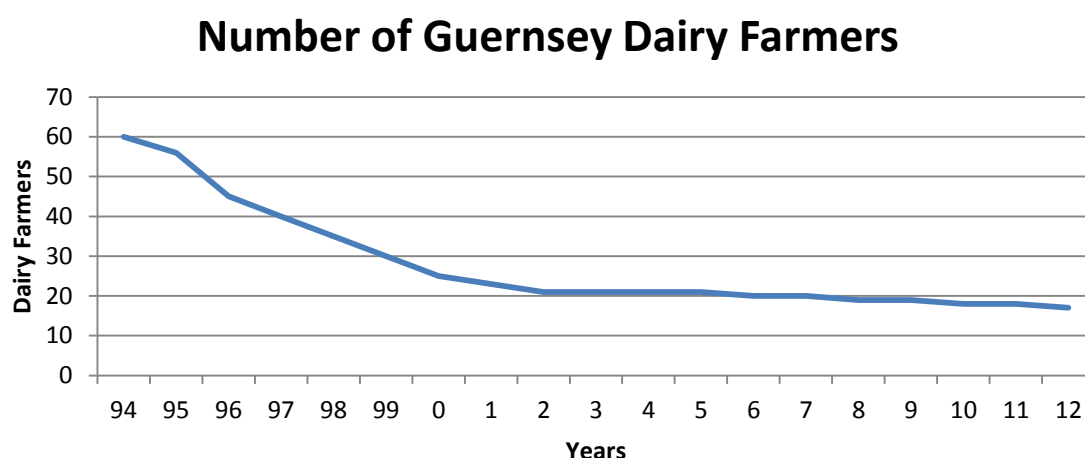
There is also a move towards 'cross-bred' cows within England, which makes it even more important to retain a gene pool of purebred Pedigree Guernsey cattle within the island in the future. The breed in Europe is 'at risk' and if numbers of purebred Guernsey cattle decline further it could become an 'endangered' breed in the future.

### 2.1 Number of commercial dairy farms

Following a steep decline in dairy farm numbers within the island during the 1990's, the number of dairy farms producing milk for the dairy since 2001 (when an annual milk quota for each farm was introduced) has been much more stable. This situation is likely to continue as most farmers intend to continue managing their dairy farm businesses up to, or beyond, normal retirement age and there are now a number of young farmers who wish to take on existing established farms as they become available.

The reduction in farm numbers is not unusual in Guernsey but mirrors similar changes that have occurred in the UK and throughout the developed world. Dairy farms have become much more mechanised in recent years which has meant that an individual farmer can keep many more cows, better and more efficiently managed than in the past. However, it is very unlikely that local farmers would find it either manageable (given the very small field sizes in Guernsey) or worthwhile to increase their herds to a size similar to those which may now be found in England, where herds of over 300 milking cows are commonplace.

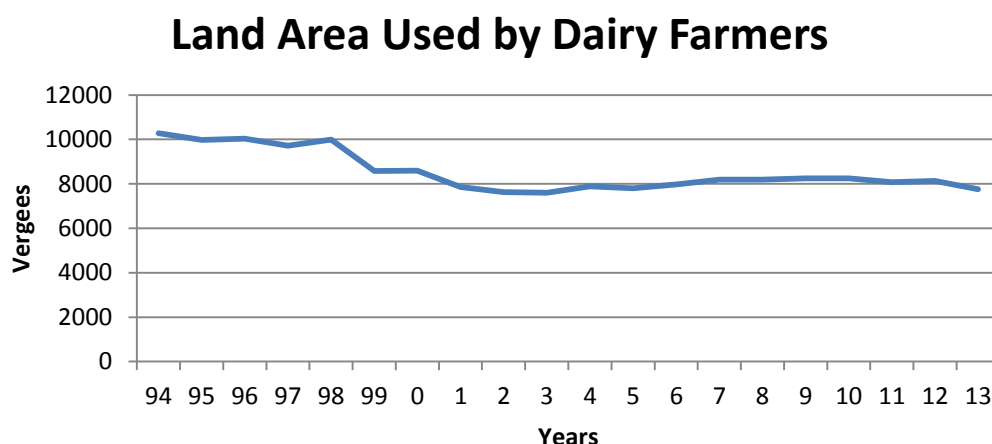
**Graph 1: Showing the Number of Dairy Farmers in Guernsey (1994-2013)**



A similar process of farm rationalisation has occurred in Jersey, which now has a similar number of commercial dairy herds to the numbers here in Guernsey, but the average farm in Jersey, less constrained by small field sizes, has almost twice the number of milking cows in their herds. The 18 'costed' dairy farms in Jersey had an average of 160 cows per herd in 2012, compared to 80 in Guernsey.

## 2.2 Use of agricultural land resources for dairy farming

**Graph 2: Showing the Area of Agricultural Land used by Commercial Dairy Farmers in Guernsey**



Some 8,000 vergees of land are used annually by dairy farmers, which is over 50% of all agricultural land in the island. In total, over 10,000 vergees of land is used each year for productive agriculture. As the numbers of farmers has reduced so has the amount of owner-occupied land being used by farmers, so that now only 10% of land used by dairy farmers is owner-occupied and 90% is rented, mainly on enduring annual tenancies and 'gentlemen's agreements' for individual fields. This means that the retention of sufficient land is an abiding concern of many local dairy farmers. Some farmers maintain that the lack of secure land tenure leads to a feeling of insecurity which has an impact on farmers' willingness to make investment decisions, particularly in buildings and fixed equipment.

The dairy herds are now concentrated on the better quality, free draining soils that are mainly located on the southern plateau of the island.

Dairy farmers still use the same small, fragmented Guernsey fields and all have land in different locations around the island, many having to travel considerable distances to manage the land that they farm. This significantly increases the cost of farming in Guernsey and increases the amount of labour and machinery that is required.

## 2.3 Development of larger and more intensively managed dairy farms

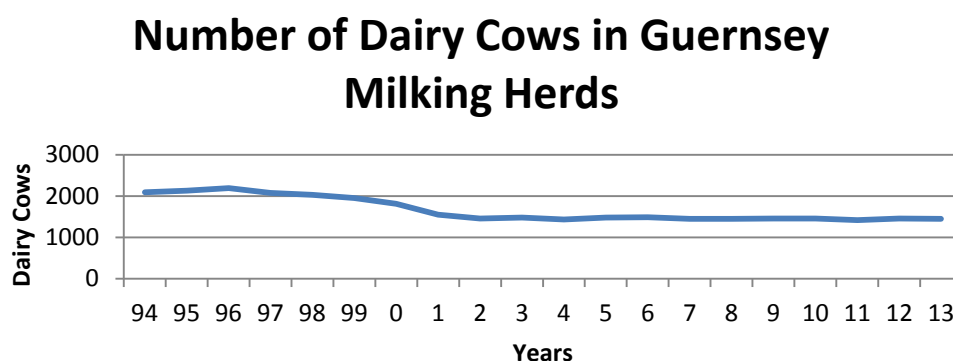
Faced with increasing production of milk in the island, individual farm milk quotas were introduced in 2001. Within Europe (including the UK), the milk quota regime that was introduced in 1984 to reduce production will be abolished in 2015. This will release farmers to increase production and to expand their dairy herds. Whilst this could bring about a reduction in milk prices, many UK milk processors anticipate that global demand will outstrip production, leading to higher milk and dairy product prices in the future. Concerns over food safety and food security are also expected to cause consumers to seek the reassurance of high quality products and the clear labelling of local, home produced supplies.

Considerably larger farms are being developed in England and, in the future, it is likely that there will be numerous farms with more than 500 cows housed in one location and many herds of over 1000 cows. This is unlikely to ever be either acceptable or feasible in Guernsey, but keeping larger herds of high yielding cows is undoubtedly more efficient and could exert a downward pressure on international milk prices in the future. Unfortunately, if locally produced milk is to compete on price as well as quality with milk that is available in the UK, then the development of fewer and larger dairy farms in the island is perhaps inevitable.

#### 2.4 *The link between the local demand for fresh milk and cow numbers*

The number of cows kept for milk production in Guernsey is very closely determined by the quantity of milk required in order to supply the local demand for fresh milk. This requirement is reflected in the annual milk quota that is assigned to each of the island's dairy farms. In practice this has meant that local farmers have kept about 1450 cows in their herds since the introduction of milk quotas in 2001. These cows fulfil the island population's requirements for fresh, locally produced milk as well as providing sufficient surplus milk at certain times of the year, which is used to make high quality local cheeses.

**Graph 3: Showing the Number of Milking Cows in Guernsey Commercial Milking Herds (1994 – 2013)**



#### 2.5 *Increasing size and mechanisation of farms*

Whereas in the past there were many small herds that were mainly milked and worked using hand labour, nowadays dairy herds are much larger and most of the heavy manual work is undertaken by mechanised equipment.

The winter grass and maize silage feed for the dairy herd is made using modern, high output 'contractors' equipment that can process all the food required for the herd in one or two days, whereas previously it might have taken an individual farmer two weeks to conserve the food for a smaller sized herd. Silage is made instead of hay, which required extended periods of dry, settled weather and much more hand labour to cart and handle the small bales of hay. Nowadays most supplementary feed is imported as a balanced cereal and soya-bean based 'concentrate' feed, although some farms do still produce home-grown crops of fodder beet for their cattle and one farmer grows cereals for his animals.

There were 16 dairy farms remaining at the end of 2013 (now 15 in 2014) but these herds still produce sufficient milk for the island's domestic requirements. Due to increased mechanisation farms have grown larger, more cows can be kept per person employed and improved breeding, feeding and management of cows has meant that the average milk production per cow has increased.

## 2.6 *Larger farms or more small farms?*

Whilst some might yearn for past years when there were many small farms operating in the island, if there were more milk producers now it would mean that the milk output from each of the dairy farms would have to be reduced by the imposition of a lower milk quota (or contract) per farm, as the export of milk and most dairy products is uneconomic. This would mean that the 'net margin' of the industry, or profit made by the industry as a whole, would have to be divided between more farmers, thus 'slicing the cake' even thinner. This would mean that each individual farmer would make less profit from dairy farming, which might in turn encourage more farmers to seek other forms of employment or retire earlier.

Therefore, the trend towards fewer but larger herds of dairy cows is likely to continue. Whereas, with limited mechanisation, a farm with 15 dairy cows would have been a full time occupation in the 1950's (and might even have required the employment of additional farm staff), given investment in buildings and appropriate modern labour saving equipment, that same farmer today might look after a herd of 60-80 dairy cows or more if he (or she) employs family members or additional staff on the farm.

Guernsey farms are now well mechanised and modern. Whereas in the past there were many small and medium sized farms milking cows by hand or in a traditional milking stable system, now all farms have specialist milking parlours with separate dairies and chilled bulk milk tank facilities. All cows are housed in 'free-range' systems with free access cubicle beds for the cows to lie down upon. All farms have specialist slurry storage facilities to protect the environment, which should contain a minimum of 4 months of slurry during the winter months. Farms are also well equipped with modern tractors and equipment, whilst most silage making is undertaken by a local farm contractor using large scale self propelled equipment.

The move to larger, more efficient dairy farms has had a number of consequences. Chief amongst these is the fact that the dairy farmers that remain have been able to make a better income whilst milk prices to consumers have not needed to increase as much as they would have had to if there had still been many small farms to support. At the same time, local farms would have had to become considerably larger and keep many more cows if they had needed to compete with imported milk at English prices and without the 'Dairy Farm Management' States support payment.

It should not be thought that large dairy farm businesses are a panacea to success in the future. Large farm businesses, particularly in Guernsey, can become very complex and difficult to manage effectively, largely due to the fragmentation of land and small field sizes. However, one notable consequence of having larger farm businesses is that they tend to be more efficient and, critically, it means that employed staff can take over the work of milking the cows, thus giving the farmer more time to be with his or her family or to take time away from the farm. It also means that there can be a career progression as young people can gain experience of working on farms, perhaps before taking over a farm in the future as the current owner retires.

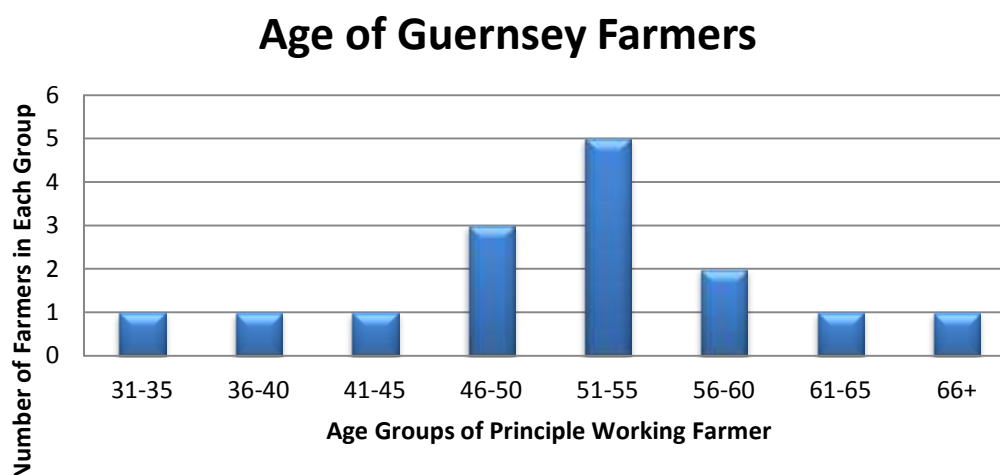
There is little justification for encouraging a larger number of dairy farms at this time but it must be accepted that the fewer the dairy farms there are in the island, then the more vulnerable the Dairy (and the island) is to shortages of supply brought about by farmer illness or adverse consequences on individual farms.

## 3. The Age Profile of Dairy Farmers in Guernsey

The average age of the principle working farmer is 51 years. However, because there are so few farmers just one or two new entrants can make a big difference. This age pattern of farmers in the industry is very similar to the age structure of farmers in other places, such as in England.

Many of the current farmers either inherited or started their dairy farm businesses on their own and at that time they were able to develop successful businesses from a very small base, perhaps starting with just a few cows and with rented land and buildings.

**Graph 4: Showing the Age of Guernsey Farmers**



Hygienic standards, animal welfare and environmental requirements on farms are now much greater than they were only a few years ago, which has meant that the investment in buildings and machinery is much greater. This has meant that it is no longer possible for a young person to purchase a few cows and start farming on rented land with very little investment.

#### **4. Farm succession and its challenges - developing new ways to start farming**

The island now has just 15 dairy farms and could potentially have fewer in the future as elderly farmers choose to retire, unless they pass their farms onto a family member or a new entrant. Farm succession is now more likely as there are a number of young farmers who wish to take on their own farm businesses, whereas there were fewer potential new entrants in the past when farming was a less attractive career.

At one time a young farmer could buy a few cows and set up in farming on some rented land with very little capital resources. After a few years and with developing contacts he could take on more farm buildings and extra land, which would enable him to keep more cows and develop his business. In time, he could purchase land, develop new buildings and build up equity in the business. Such times have changed.

Agricultural land prices are hugely inflated compared to what they once were, having largely been driven up by non-farming investors and those wishing to purchase land in Guernsey for non-farming purposes. The investment required for farm buildings, slurry stores and equipment is also substantial. Today there is very little possibility that a young farmer could start farming and milk production from scratch unless his/her family was already in farming or she/he already had substantial financial resources available. This is perhaps no different to a young person wishing to start farming in other places.

As a consequence there is a need to find new ways that young farmers can take over the running of successful established businesses, as and when they become available. Currently, young farmers are considering 'share-farming agreements' (where they might purchase the dairy herd but have a partnership agreement with an existing farmer who wishes to 'take a back seat') and 'contract



farming agreements' (often with equity transfer over a period of time) with an existing farm owner who may wish to retire.

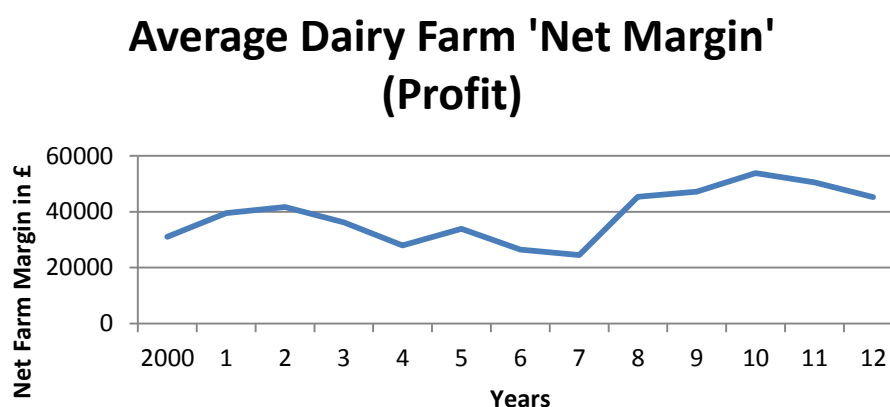
Contract farming, with equity transfer, may be a good solution for both an existing farmer wishing to retire and for a young person wishing to start farming on their own. Operating an existing farm on a fixed term contract is a way that a young farmer might take over an existing business or a farm from his or her parents whilst suitable provision is also made for other non-farming siblings.

## 5. The Farm Business Accounts Survey

The annual Farm Business Accounts Survey was used to monitor the effect on farm businesses of the introduction on 1<sup>st</sup> January 2001 of milk quotas and the States funded 'Dairy Farm Management Payment'. The initial effect of this was to improve average farm profitability although it was noticeable that farm 'overhead' costs did not significantly reduce due to cost savings as had been anticipated.

Farm 'net margin' or 'profit' initially increased, but then as farming costs started to increase the average margin of profit once again declined. It should be noted that, whilst family and employed labour is deducted before the net margin is calculated, the convention is that the value of the farmer's own work on the farm is not taken into account.

**Graph 5: Showing the Average Net Margin (Profit) of all Guernsey Dairy Farms**



Following the political change from the Agriculture and Countryside Board to the Commerce and Employment Department in 2004, there was little increase in the price that farmers were paid for their milk production for several years until 2007. During that period farm profits (and the Dairy operating margin) were squeezed as costs escalated.

In 2007 the Department decided to set up a Milk Price Review Panel to determine future changes in the retail and farm-gate milk prices. From that time a panel comprised of a UK chairman and two Guernsey based members (with a second supernumerary UK member since 2012) has advised the Board each year on increases in the retail and farm prices of milk. The annual farm business accounts survey provided detailed retrospective information on a representative sample of local dairy farms, which guided the panel in their decisions.

This has coincided with a period of considerable price volatility in the costs of milk production, particularly in the cost of imported cattle feeds, fertilisers and fuel. The extreme weather conditions in many parts of the world in recent years has also affected the price of the imported cereal and

protein feeds that are fed to dairy cows to support the production of milk and so whilst the milk price paid has increased, so has the main cost element of dairy farming.

### 5.1 Financial information collected in the Annual Farm Business Accounts Survey

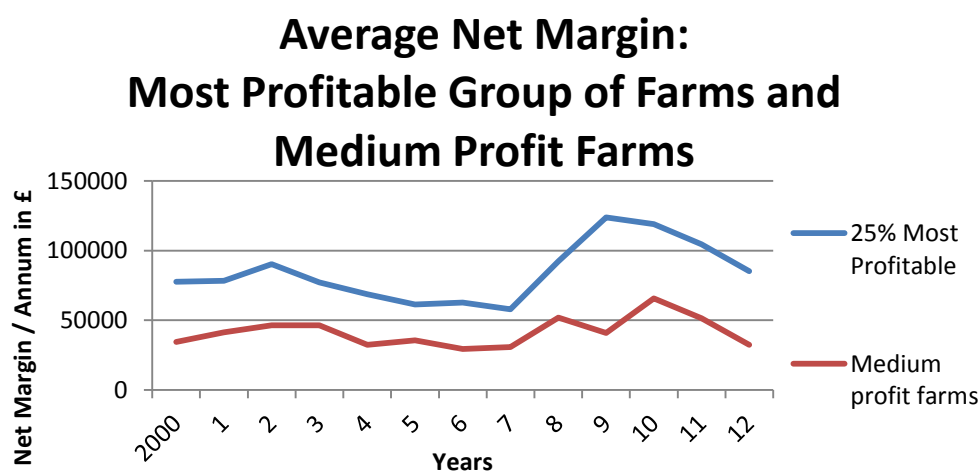
The financial information collected from all farms taking part in the Annual Farm Business Accounts Survey (normally 14 in recent years) is presented in two ways:

1. As a report showing the average output and costs of all participating dairy farms.
2. As a report on three groups of farms based on annual profitability and divided into the top 25%, a medium 50% and a bottom 25%, all based on farm profitability in that year.

For instance, in 2012 the average 'net margin' (profit) of milk production was £45,180, which was a reduction from £50,456 in 2011 and from £63,458 in 2010.

In 2012 the top group of most profitable farms made an average of £85,298, the 'medium profit' farms made an average of £32,286, whilst the group of least profitable farms made a net margin of only £13,688. This was a considerable reduction in profitability from 2010, when the most profitable farms had an average net margin of £118,883 and the medium profit farms made a net margin of £65,654. It should be borne in mind that the largest farms are not necessarily the most profitable businesses and often it is the best managed farms with lower costs that make more profit.

**Graph 6: Showing the Average Net Margin of the Most Profitable Group of Dairy Farms and the Medium Profit Group of Farms**



Even in difficult years the best managed and most profitable farms have maintained an acceptable net margin, or profit, largely by controlling farm input costs. However, if costs are not rigorously controlled, farms do suffer from inadequate and volatile income.

### 5.2 Reduction in Farm Net Margin (Profit) in 2011/2012

The reduction in profits in recent years was mainly caused by a rise in farm operating costs and particularly by the cost of imported animal feeds, brought about by extreme weather events in various parts of the world and increased demand that have driven up commodity prices.

Farm profits can also be adversely affected by weather conditions in Guernsey. Dairy farming is very severely affected by the weather and poor growing conditions or wet weather at harvest time can have an immense impact on profitability for one whole season if not more.

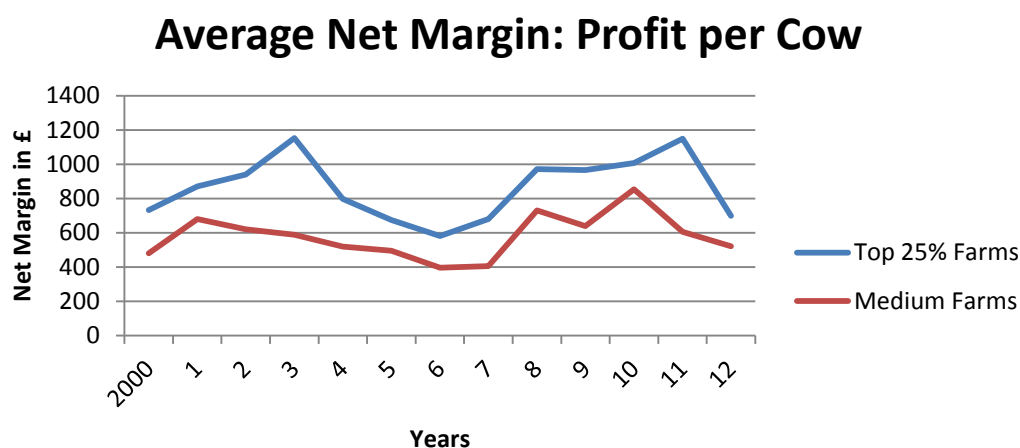
The wet weather conditions in Guernsey during 2012 resulted in poorer quality silage being made and there was significantly less of it as the grass had not grown as well during that spring. Similarly, the wet weather conditions delayed the sowing of the maize crop that is grown by many farmers locally to provide additional high energy silage for the winter feeding of their cows and the conditions that autumn meant that some crops could not be harvested. This meant that many farms were short of home grown winter feed for their cattle, which resulted in the importation of considerably more cereal based 'concentrate' feeds than normal. The weather conditions in the UK and elsewhere also resulted in lower cereal crop yields, causing an increase in the cost of imported cattle food.

These factors and other cost increases all had an impact on the profitability of dairy farming in the island in recent years. To some extent this can be viewed as a normal 'business risk', although it is known that the Guernsey Milk Price Panel did take these factors into account when considering their recommendations for the milk price in the subsequent year.

### 5.3 Calculation of Farm Net Margin for each cow in the herd and for each litre of milk produced

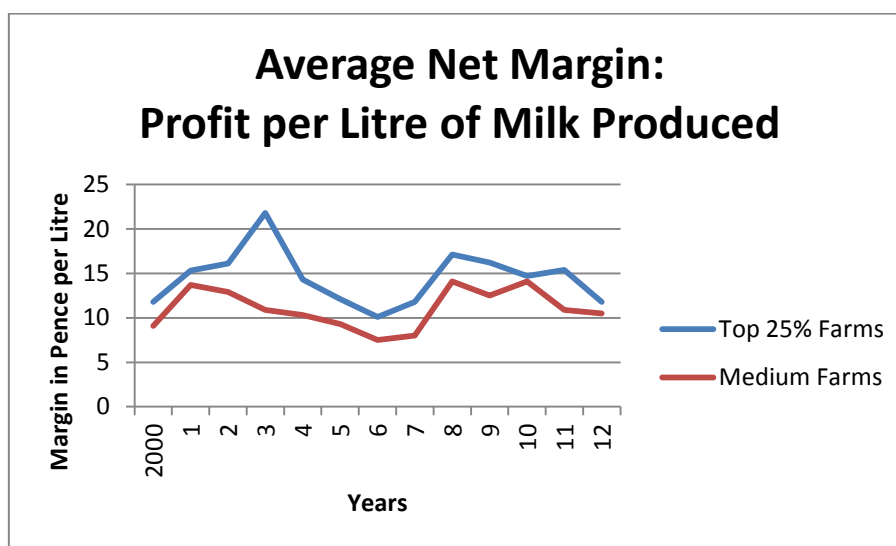
Another way to compare farm net margin (profit) is by comparing the profit 'margin per cow' in different years and yet another is by looking at the profit 'margin per litre' of milk produced.

**Graph 7: Showing the Average Margin per Cow in the Top and Medium Profit Groups of Farms**



The top group of Guernsey dairy farms make considerably more profit 'per cow' than the medium or lower profit farms. Farms can and do move between the different groups from one year to the next, depending on their fluctuating profitability. Whilst farms do tend to hold their position relative to other local farm businesses from one year to the next in the 'league table' of farm profitability, unusual on-farm events, such as a large purchase, can depress an individual farm's profits in some years. In those years one farm that may normally be in the top group for farm profits, might become less profitable and appear in the medium group, whilst another farm will take its place in the top group of farms.

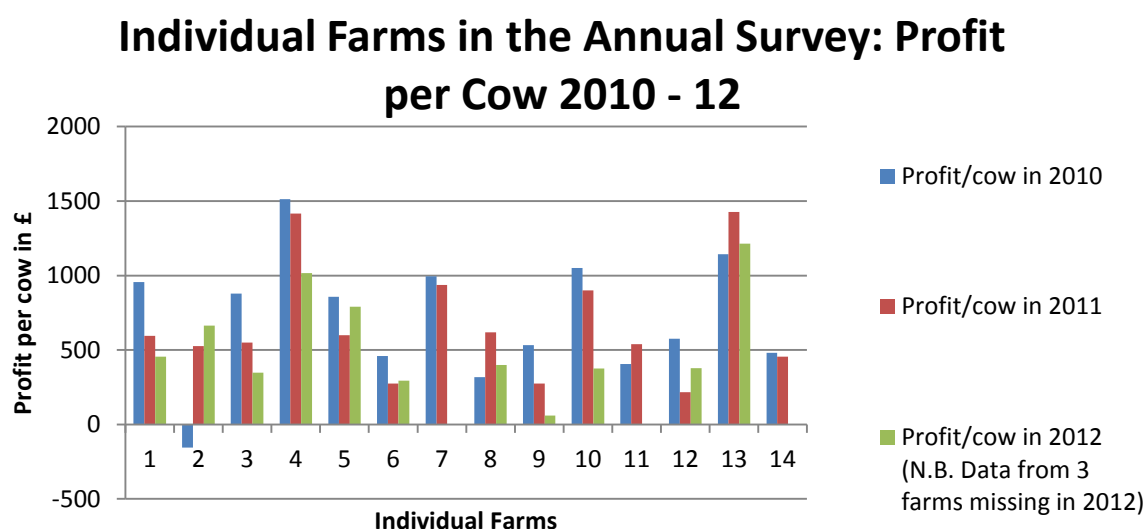
Profitability is not just a matter of farm size. Some medium sized farms can actually be more profitable because they manage their cows better or manage the costs of production better than some of the larger farms. In some circumstances it can be very expensive to make a small increase in the size of a herd if, for instance, an additional person had to be employed or substantial additional building work was necessary in order to provide suitable facilities. One can see a similar effect when considering the margin of profit that has been made per litre of milk produced.

**Graph 8: Showing the Average Margin 'per litre' in the Top and Medium Profit Groups of Farms**

In many cases the farms that make a greater margin, or more profit, do so because their costs of production are lower rather than because the cows necessarily produce more milk, although herds and cows that produce more milk (and therefore have a greater financial output), will normally make more money per cow (and per herd), unless the costs of producing that extra milk are too great.

#### 5.4 Individual Farm Data

Whilst complete confidentiality is maintained, it is clear that individual farm businesses operate according to different personal circumstances. Some farms exhibit greater management capability than others, whilst some may have greater costs due to other factors. Some farmers might be motivated to obtain high financial profits and work very long hours whilst others may wish to continue farming but employ more farm staff or machinery than might at first sight be essential. Some farmers may be more technically competent than others. These differences in personal circumstances and choices are reflected in the very marked difference in net margin (or profit) of individual farms.

**Graph 9: Showing the Net Margin (Profit) per Cow on Individual Dairy Farms for 2010-12**

In order to examine variability in business efficiency on individual farms in more detail, figures on a per cow and a per litre basis have been provided for 14 farms in 2010 and 2011, but only figures from 11 farms were available in 2012.

The data shows large variations in costs per cow and in costs per litre between different farms. Given the fact that all farms will receive the same payment per litre for their milk, which is the main output from each farm, one might expect very similar profits to be made by the different farms but that is not the case.

The process of milk production is very similar on each farm and yet there are large differences in costs. For example, some farmers spend much more on imported dairy feed than others. While this is not a problem if the cows produce sufficient extra milk to cover the additional costs, on some farms the yields are not particularly high despite the amount of feed being used. These differences probably indicate varying levels of farming skills and if these were improved then profitability should increase.

Within the overhead costs, there are also large variations in the costs per cow and per litre between farms. In the cost of labour, larger farms tend to spend more on labour costs than small or medium sized farms, which may employ very little additional labour and rely more heavily on family labour.

Machinery is an expensive asset to have on a farm. The data shows that the average running costs of machinery tends to rise year on year but there are again very wide variations in costs between individual farms. Similarly, one might imagine that spending on new machinery might be linked to the profitability of the business but the depreciation cost of machinery does not seem to bear this out. Some farmers seem to have more machinery than their neighbours, perhaps in an effort to be less reliant on contractors although this does not always seem to have been achieved. Generally farmers will try to mechanise tasks in order to reduce labour requirements but sometimes the anticipated savings in labour costs have not materialised and may not be possible in a business relying on family labour.

As a consequence, whilst the 'average' financial performance of all dairy farms in the island is considered, there are very wide differences in the level of net margin or profitability between neighboring farms. Perhaps like any business, some farms are consistently more profitable than others. This wide variation between farms is caused by factors that can be controlled on individual farms, such as the herd's output of milk and the various costs of production, including the amount of food fed to obtain that output of milk and the overhead costs of production, such as the cost of labour, machinery, buildings, rental, financing, etc.

## **6. Key Drivers of Farm Profitability**

Although external influences and pressures (such as the milk price attainable, the feed price, etc.) do have a marked effect on farm profits, there is still a huge range between the best managed farms and those that have greater costs. Overall farm profitability is very closely linked to the costs of production and these can be affected by the decisions made by individual farmers and the way that individual farmers choose to manage their businesses. The key 'drivers' that explain much of the difference in the costs of production between different farms are:

1. Imported feed costs
2. Labour costs
3. Power and machinery running costs
4. Machinery (and building) depreciation.

### 6.1 *Imported feed costs*

The cost of imported cattle feeds has increased dramatically in recent years and, as it accounts for about 25% of all costs of milk production in the island, can be a very substantial figure making the difference between a farm making an adequate profit and not doing so.

The shortage of land available for dairy farming in the island means that less home grown food (in the form of either more grass or maize silage or crops such as fodder beet or cereals) can be grown and used in the island instead of such a great reliance on imported feeds. As a consequence more cereal based concentrate feeds are imported and fed to dairy cattle in the island than was the case in the year 2000. The quantity of concentrate feeds used in the island is also substantially greater than on farms in the UK where, in the main, dairy farms have more land available and can make more silage as a winter feed for their cows. Cows have a nutritional requirement for a certain level of energy and protein in their diets based on their individual body requirements and the amount of milk that they produce. If there is insufficient locally grown food available to provide this dietary requirement then more imported cattle feeds must be used as a supplementary source of food.

As an example of the escalating costs of imported concentrate feeds, both in terms of the cost of the feed, the transport cost of the feed to the island and the extra food that is being provided for the dairy cattle, imported feed cost the 'medium' profit group of farms 6.6p per litre of milk produced and sold in 2000, but 16.4p per litre of milk produced and sold in 2012, which was admittedly a very difficult and costly year. The cost of imported feeds on the 'top 25%' of farms was 6.7p per litre in 2000 compared to 13p per litre of milk produced in 2012 or double the cost in 12 years.

In England, feed costs are considerably lower, mainly due to the fact that as land is more readily available, farms there grow considerably more home grown forage (grass and grass silage, etc.) for their cattle and consequently use less imported cattle feeds, but the local Guernsey situation is made more expensive by the obvious cost of shipping cattle feeds into the island.

As a comparison of costs, in England the 'feed and forage' (imported concentrate feeds plus grass and silage) cost for the average DairyCo Milkbench+ sample of over 300 dairy farms<sup>1</sup> was 8.0p per litre in 2010/11, 9.0p per litre in 2011/12 and 10.3p per litre in 2012/13. By comparison, in Guernsey the average forage cost was about 3p per litre in each year, but the costs of imported feeds used increased from 11.9p per litre in 2010, to 13.1p per litre in 2011 and 13.9p per litre in 2012.

Thus it cost about 16p per litre of milk produced to feed the average dairy cow in Guernsey, compared with just over 10p per litre in the Milkbench+ sample of English dairy farms. This is likely to be due to the extra costs of growing cattle feed in Guernsey and the greater quantity of imported feeds used by local farms as well as the added costs of transporting that food to the island.

### 6.2 *Labour costs*

Some farmers in Guernsey employ very little labour to help them in operating their farm businesses. These farms are mainly small or medium sized farms, perhaps with some family help at key times when extra hands are needed. These small and medium sized farms tend to generate less profit unless they are particularly well run and costs are kept to a minimum. However, considering that dairy farming is a 7 days a week occupation and that the cows must be fed and milked twice a day, a farmer that employs no labour at all will have very little time available for family commitments and no possibility of holidays. A number of farms in this category employ casual labour, perhaps on one or two days each week or during peak annual work times.

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<sup>1</sup> DairyCo Milkbench+ Evidence Report: Analysis of the Milkbench dairy benchmarking data for 2012/13, published February 2014.

As farms become larger and the management becomes more complex, more farm staff are required. These need to be well motivated and technically very competent if they are to successfully play a full part in milking and managing dairy cattle or operating some of the expensive equipment that is now used on most farms. Many farmers and the staff that work on farms do so knowing that they could most probably earn significantly higher salaries for fewer hours of less arduous work if they chose other occupations.

In a recent survey farmers were asked how much time they, their families and their employed farm staff spent working on the farm. The average dairy farm in Guernsey was said to require 7316 hours of work each year or an average of 87 hours for each cow in the milking herd. Individual farmers reported that they themselves spent anything from 3000 to 6000 hours (an unusual case) per year working on their own farm. In some cases they rarely took time away from the business. On average, farmers worked 3500 hours per year on their farms.

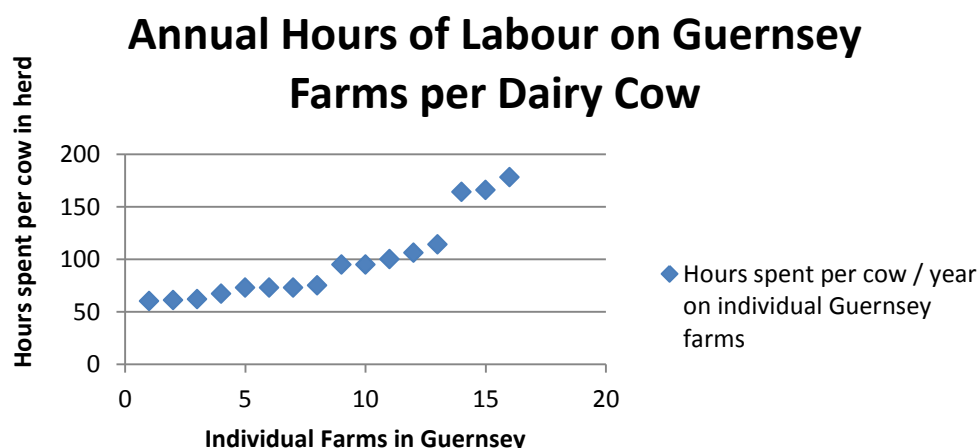
Even when this large commitment of unpaid work is taken into account, farmers in Guernsey spend much more on labour costs than their counterparts in England. In part this is probably because of the economies of scale as UK dairy farms tend to be much larger businesses but it is also likely to be due to the size and speed of the milking equipment and particularly due to the very fragmented land parcels, with very small sized fields, that are used in Guernsey. The extra cost of transport and travel to off-lying land in Guernsey is considerable when ones takes into account the labour costs but also the wear and tear and fuel used by tractors and machinery.

DairyCo Milkbench+ statistics<sup>2</sup> indicate that the labour efficiency, in hours of work per cow/annum was 25 hours per cow for the top ten farms in their UK survey of over 300 farms but that the bottom 10 farms spent on average 33 hours more per cow/year than the top farms (58 hours per cow/year).

In Guernsey, by comparison, the most efficient farms spend over 60 hours of work each year for every cow in the herd. The average time spent each year was 87 hours and the owners of several small farms indicated that they spent over 150 hours per cow on the management of their dairy herd each year.

The variation in labour costs per litre of milk produced on individual Guernsey farms can also be shown graphically.

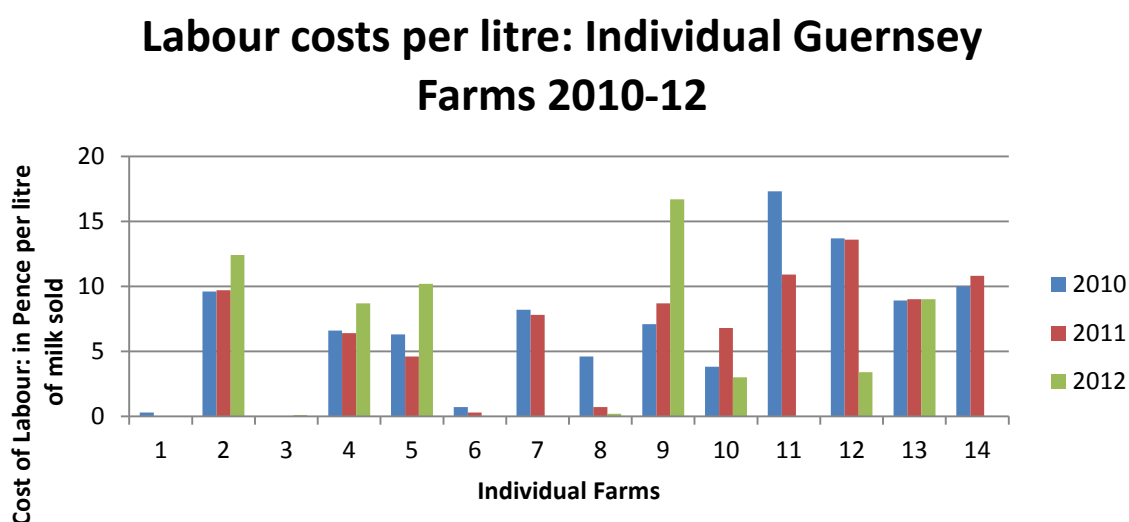
**Graph 9: Showing the Hours of Labour Spent Working on Farms in Guernsey, per Dairy Cow in the Milking Herd**



<sup>2</sup> Profiting from Efficient Milk Production, DairyCo Milkbench+ 2012.

As one might imagine, the average labour cost per cow or per litre of milk produced in Guernsey is very high compared to UK benchmark figures. The average cost of paid labour (not counting imputed own labour) on farms in Guernsey ranged between 6.6p per litre of milk produced and 8.6p per litre of milk produced over the past 4 years, with an average cost of 7.5p per litre. By comparison, the labour cost per litre of milk produced in England, as reported by the DairyCo Milkbench+ Report 2014, ranged between 4.1p per litre in 2010/11 and 5.2p per litre in 2012/13. This figure included the cost of paid and unpaid labour!

**Graph 10: Labour costs per litre of milk sold on 14 individual Guernsey farms**



In Guernsey there are huge variations in the on-farm labour costs. It can be seen that on some farms little or no labour is employed at all, apart from perhaps some unpaid family assistance. On other farms, the labour cost can be substantial. In one case up to 17.3p per litre of milk sold in 2010 and on another farm 16.7p in 2012 but these are exceptions. There was surprising variability, even on individual farms from one year to the next.

### 6.3 Machinery running costs

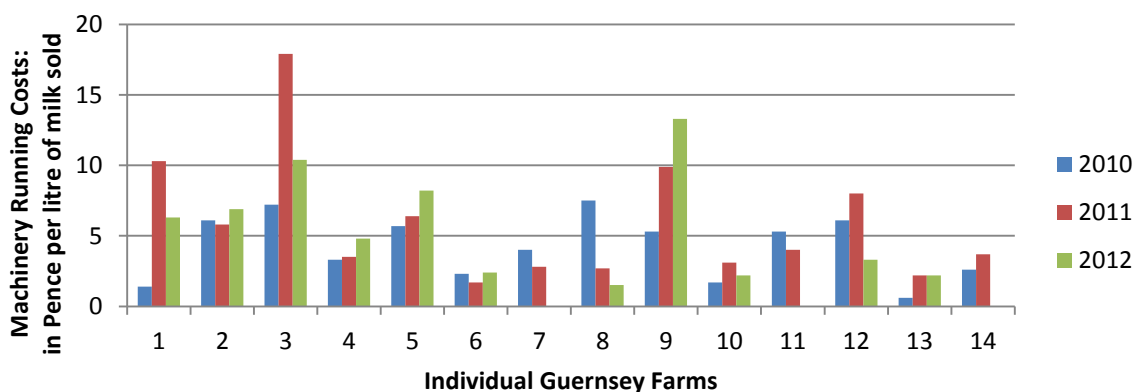
Labour and machinery costs are often considered to be at least partially substituted for each other, so that farms that have a high use of machinery tend to have less reliance on labour and are able to realise efficiency improvements and cost savings. However, the benchmarking data suggests that few farms profit from this trade-off whilst the majority experience an increase in both labour and machinery costs.

Machinery costs in Guernsey are substantial, both in terms of annual running costs and in the depreciation costs of new equipment. In the UK DairyCo Milkbench+ survey, machinery and equipment costs in pence per litre of milk produced tended to be between 2.5p and 6p per litre, whilst machinery depreciation costs were mainly between 0.5p per litre and 2p per litre. By comparison in Guernsey, the average machinery running costs over the past 3 years was 6.2p per litre, with an annual machinery depreciation cost over the past 3 years of 4p per litre of milk produced. Therefore, although the annual running costs of the equipment were broadly similar, it appeared that machinery depreciation was virtually double the cost in Guernsey than on dairy farms in the UK. This is understandable given the likely efficiency savings of having larger herds in the UK and being able to spread the cost of mechanisation across a much larger production of milk (in litres).



**Graph 11: Machinery running costs per litre of milk produced on individual Guernsey dairy farms**

### Machinery Costs per Litre: Individual Guernsey Farms 2010-12

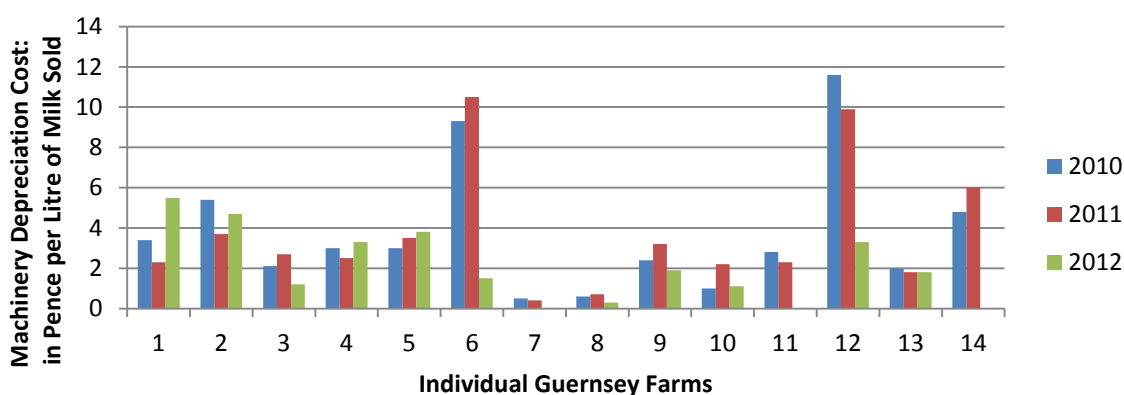


#### 6.4 Annual Depreciation of Machinery

Machinery is an expensive asset to have on a farm but a certain level of machinery purchase is necessary to reduce manual labour on farms and to carry out tasks that could not otherwise be undertaken. Large farms will tend to need more tractors and machinery than small farms and to some extent machinery purchases (and therefore, depreciation) is linked to the profitability of the business. Certainly most farms seemed to reduce their spending on new machinery in 2012, possibly in the expectation of lower profitability following increases in the costs of cattle feeds or alternatively because profits had fallen in the previous year. Machinery depreciation is tax deductible and has traditionally been viewed as a means by which farms can reduce their tax liability in years when profits are good.

**Graph 12: Showing Machinery Depreciation costs per litre of milk sold on individual Guernsey dairy farms**

### Machinery Depreciation per Litre: Individual Guernsey Farms 2010-12



## 7. Summary and Conclusions

Dairy farming and local fresh milk production for island consumers fulfils a number of important objectives. It maintains biodiversity in the traditional Guernsey countryside, its field boundaries and wildlife, whilst at the same time preserving Guernsey's iconic breed of dairy cow. It provides locally produced high quality milk of known provenance and maintains food security which is becoming increasingly important. However, farming could not survive in its current form within the island unless it was supported by local residents and consumers. Fortunately, dairy farming within Guernsey retains that support.

1. The land ownership and tenure system in the island makes dairy farming in the island more difficult and less dependable than in some other countries, meaning that there is reason why farmers may be reticent to make long term investments in their farming businesses.
2. Small field sizes and land fragmentation mean that it is more difficult, more costly and more time consuming to farm in Guernsey than on larger continuous areas of land in other places. This acts against the development of larger farms, large scale mechanisation and improved efficiency of production.
3. The number of dairy farms in Guernsey has reduced but, whilst one might regret this, it is a natural progression and means that the remaining farms can be more productive, operate more efficiently and be more profitable
4. The average age of dairy farmers has increased in recent years but there are now significant numbers of well motivated young farmers who work in the industry. Developing new ways to pass developed farm businesses on to young farmers and new entrants is a challenge.
5. The annual 'Farm Business Accounts Survey' has been used to monitor the increasing costs of milk production within the island. An excellent data set that indicates annual fluctuations in farm output, costs and farm profitability is available.
6. Farm costs are considerably higher in Guernsey than elsewhere, in part due to the fact that much of the concentrated cereal and protein food for the cattle must be imported. Virtually all of the buildings, machinery, dairy supplies and sundries that are required for successful and efficient businesses are also imported.
7. Although farm costs are high, the price that farmers are paid for their milk production is also substantially higher than in the UK. There is also a significant element of States support that helps to maintain dairy farming in the island.
8. Guernsey Dairy is operated as a 'not-for-profit' business which means that a higher price can be 'returned' to dairy farmers for the milk that they produce rather than being retained as operating profits for a separate business enterprise.
9. Although the farm-gate milk price has been increased in recent years and farm profits initially improved, profits have fallen back again in the past two years due to a combination of factors. These have included poor weather conditions and high (and volatile) prices for farm inputs, particularly for imported cattle feeds, fertilisers and fuel.
10. The average farm profit was £47,153 per farm in 2009. This increased to £63,458 in 2010 but then reduced to £50,456 in 2011 and £45,180 in 2012 (Section 6). Calculated on the same basis,

the average farm profits appear to be very similar in Guernsey to other places, such as Jersey or the UK, although the average farm and herd size in Guernsey is considerably smaller.

11. The average farm profit per cow in Guernsey increased from £575 per cow in 2009 to £846 per cow in 2010 but then reduced again to £706 per cow in 2011 and £548 per cow in the 2012 financial year. This was equivalent to a profit of 10.88p per litre of milk sold in 2009 to 15.26p per litre in 2010, followed by a reduction to 12.73p in 2011 and 10.25p per litre in 2012 due to higher input costs.
12. There is a wide variation in the net margin or profit made on individual dairy farms in Guernsey. Some farms continue to make good profits that are substantially greater than the profitability on the average dairy farm. This is mainly due to having lower labour costs and lower input costs, mainly of imported cattle feeds, machinery running costs and depreciation.
13. It is very difficult to determine whether Guernsey's dairy farmers make a high enough margin of profit. Farmers continue to work in the industry and to build successful and profitable businesses, but it must be conceded that dairy farming cannot compete with some high earning occupations. Some individual farmers could undoubtedly make a higher margin of profit if they were able to emulate some of the more profitable farms and reduce their costs but overall the only way that farmers as a whole might increase the profitability of their dairy farms would be if they are able to become more efficient and reduce some of the costs of milk production.

Andrew Casebow

March 2014

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## THE CURRENT POSITION OF THE GUERNSEY BREED

Bill Luff<sup>1</sup> (Vice President RGA&HS, Secretary WGCF)  
with assistance from Dr. Maurice Bichard<sup>2</sup>

Ever since the first written records of domesticated farm animals, and most likely before that, farmers have been selecting what they considered to be the best parents, mating them and retaining the best of their offspring. In doing so they created thousands of small local breeds of farm animals.

In recent history the genetic diversity and number of breeds has seriously narrowed. In the western world the Holstein has dominated the dairy sector and has infiltrated many other noted dairy breeds.

The preservation of genetic resources serves as a kind of insurance, providing the ability to meet future challenges. It also provides producers with the diversity required to adapt to changing conditions and markets. The facts are that food from both plant and animal origin is derived from a very few species. Food security is becoming increasingly vulnerable because of high levels of genetic erosion caused by the abandonment of traditional genetically diverse plant varieties and animal breeds. Genetic resources are public goods and those conserving them should be considered as offering a service to society.

### Genetic background of the Guernsey

The Guernsey breed evolved on the Island over centuries with few imports after 1820 other than semen since 1975. It developed unique aspects of milk quality as well as the temperament and ability to produce milk from forage in confined conditions (tethered on grass in summer, hay and roots fed in stalls in winter). Animals were exported to the UK and its colonies from the late 18th century. Worldwide total animal numbers probably peaked before WWII, with significant populations in UK, USA, Canada, Australia, New Zealand and South Africa totalling perhaps 450,000 animals. Since then, like almost all the minor dairy breeds, it has lost ground everywhere to the Holstein except on the Island where it is the only permitted breed. By 2012 the numbers of officially recorded cows had fallen to 1,500 on the Island and some 12,000 worldwide.

Since the development of Artificial Insemination and science-based genetic programmes for dairy cattle, from around 1950, the leadership in breed improvement mainly passed to the semen cooperatives or companies. A numerically small breed like the Guernsey was always at a disadvantage because of the limited market for semen. In recent years all of these organisations have ceased any pretence of running programmes in the Guernsey breed.

The World Guernsey Cattle Federation (WGCF) proposed running its own Global Guernsey Breeding Programme (GGBP) and the UK and Island associations agreed to cooperate from 2002. It is based upon research studies funded by the Milk Development Council (now DairyCo), Genesis Faraday and WGCF (itself funded by the States of Guernsey (SoG) and national associations). Support has come from several of the world's leading scientists (including from Interbull, Roslin, and Reading University) because of excellent long-term contacts. The breed has often been seen as a case study for other numerically small populations.

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Until 2012, GGBP had effectively pooled the cattle resources of the UK and Island and ran a joint programme controlled by RGA&HS and the English Guernsey Cattle Society (EGCS). Superior bull dams were identified based on breeding values calculated by DairyCo and their young sons were used to sire some two-thirds of all replacement heifers in both populations. Good progress has been made in both production and type traits, though a consequent decline in female fertility has made it necessary to utilise the newly available fertility index to try to reverse this. While inbreeding has not yet become a serious problem, a more formal programme of balancing future gains against the conservation of genetic variation is being introduced to pre-empt this and Interbull is helping to put this on a worldwide scale.

Semen collected from young Guernsey bulls on the States small AI Centre at Home Farm prior to August 2012 averaged 1900 straws annually. Of these, approximately 750 were then shipped to England for use on EGCS members' cows. In return, a similar quantity then came into the Island from both UK and US bulls. While quite a lot of North American semen has come into Guernsey since 1975 this has become less attractive as far fewer proven US bulls are available. In any case, improvement goals now differ somewhat as the Island and UK breeders want to maintain grazing cows rather than the larger types often preferred in USA.

In August 2012 the UK Department for Environment, Food and Rural Affairs notified the States Commerce and Employment Department of changes to legislation concerning semen imports from the Channel Islands. This has meant that the previous long-standing agreement allowing semen exports from Guernsey to the UK has been terminated. The new requirements are very much more demanding especially on terms of staffing. The projected costs of compliance have meant that semen export is no longer commercially viable.

Our inability to export semen to the UK from Guernsey has effectively torpedoed the successful GGBP. English herd owners can no longer access semen from Island herds of top genetic merit. Instead, they have to send more UK-bred bulls for custom collection at English centres, costing them up to £5,000 per bull for a small number of straws. If cooperation weakens, then the SoG AI Centre will also need to rear and process more bulls. Greater separation of the two sub-populations will make inbreeding control more difficult at a time when English cow numbers are continuing to shrink.

It is worth contrasting the situation in Guernsey with that in Jersey. There, it is now of no real hardship to the Jersey island farmers, or the worldwide Jersey breed, that Jersey no longer has a working AI Centre and that no semen is exported. The Jersey breed has large populations in USA, Canada, and Denmark with modern improvement programmes run by the AI companies. As a result, since semen imports were permitted into the island from five years ago, their herds have the pick of all the proven bulls in the world and no longer need to run their own programme.

Unfortunately the Guernsey breed does not have these viable overseas resources and the Island herds must work with UK breeders to keep it commercially viable. A way must be found to allow these small quantities of semen to be exchanged once again.

### **Health background**

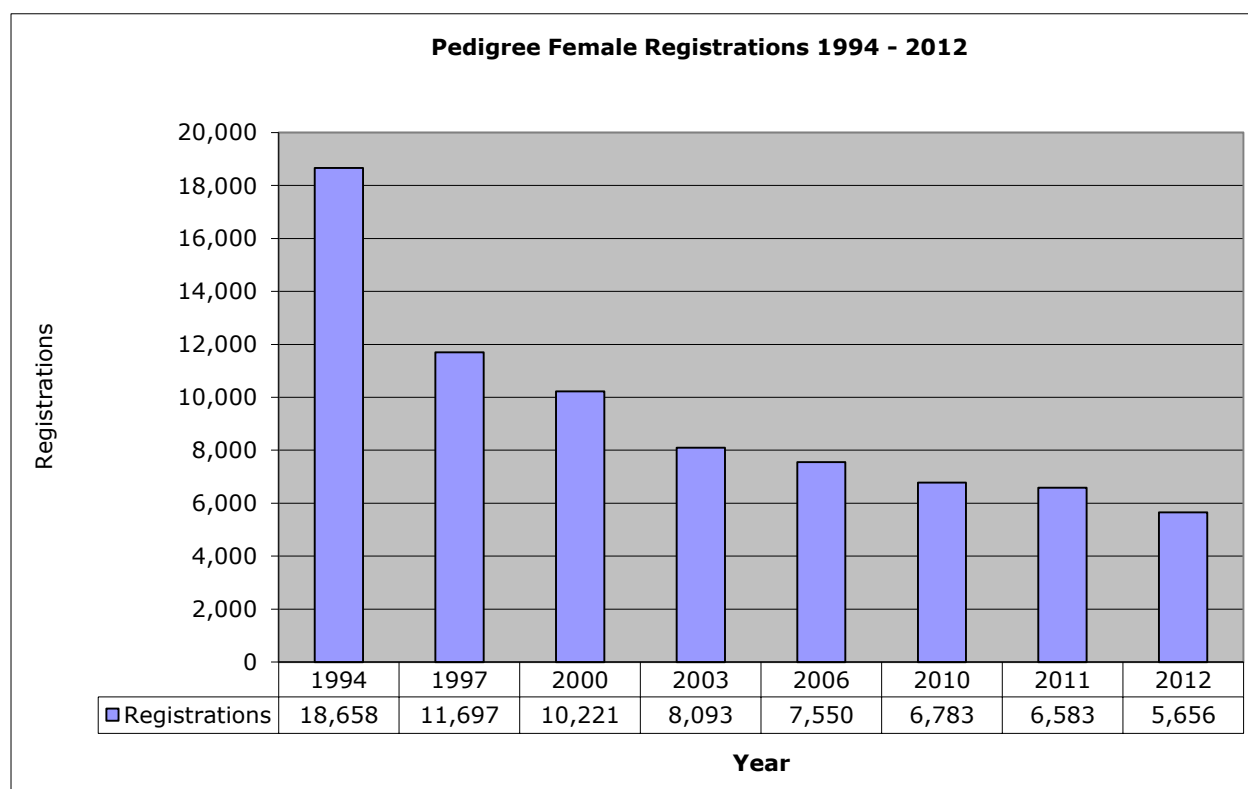
The cattle within the Bailiwick of Guernsey originate from herds that have been recognised by the competent authority as free from Brucellosis, Tuberculosis, Enzootic Bovine Leucosis, Bovine Viral Diarrhoea, Infectious Bovine Rhinotracheitis, *Leptospira hardjo* *bovis* and Blue Tongue Virus. A rolling one quarter of individual cattle within the Bailiwick herd is subject to active surveillance for these diseases annually. Bulk milk samples for all Bailiwick dairy herds are screened four times a year. All bulls on the SoG AI Centre are tested at least annually for the above diseases.

### Breed Statistics

As already mentioned, the Guernsey has always been a small population breed although there was a sizeable population in USA in former years. Even in 1980 38,364 Guernsey calvings were used in genetic evaluations in USA, this had fallen to 6,076 in 2011. That is an 84% decrease in 30 years.

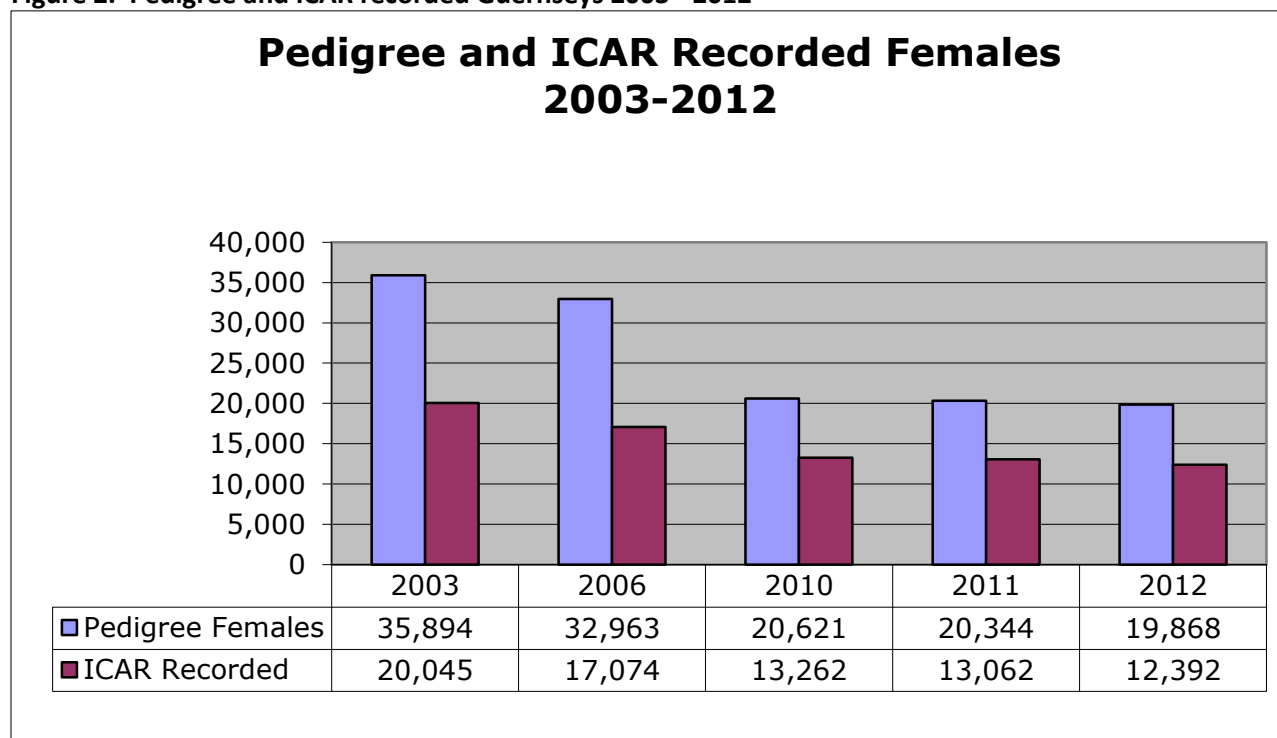
The following two figures demonstrate the current rate of decline. Data were obtained from WGCF Member breed societies and the ICAR yearly cow milk enquiry.

**Figure 1. Female Registrations 1994 - 2012**



There has been a smaller decline in Guernsey owners from 879 - 865 over the same period but it is quite clear that this figure has been mitigated by a significant number of members who own fewer than 10 animals – Guernseys seem to be popular with hobby farmers.

This worrying decline in registrations is reflected in Figure 2, which shows the decline in the global female population alongside the very important ICAR standard milk recorded population of Guernseys. Only ICAR recorded Guernseys can contribute to genetic evaluations. These are the cows on which the future of the breed must be built.

**Figure 2. Pedigree and ICAR recorded Guernseys 2003 - 2012**

### The Guernsey Advantage

The Guernsey breed has proven unique qualities particularly with regard to milk composition. Although efforts have been made over many years to capitalise on specific milk qualities such as beta carotene content, superb taste and drinking qualities, ideal composition for growing children and now beta casein A2, other than in the case of a few well planned and notable exceptions, the average Guernsey breeder has not really benefited from anything other than premiums on conventionally assessed milk quality (fat and protein content).

That may change in the future. There is some thought that as global milk markets shift there will be more opportunity for unique branded products. A leading example of that is A2 Milk, milk that contains only Beta Casein A2 protein as opposed to the more common Beta Casein A1. A2 branded milk has cleverly combined a number of marketing opportunities in Australia and claims to improve the lives of users of this premium product by selling them a more natural milk that has no additives and so may improve the lives of those who suffer post dairy discomfort. The market for A2 is now global and has reached the UK. The Guernsey breed is ideally suited to this market as 96% of Guernsey cows produce A2 milk.

There are however other untapped opportunities in the Guernsey such as the unique natural golden colour of its produce that may have future importance in markets increasingly concerned with quality.

All these positive attributes offer wonderful prospects but only if commercial dairymen want to milk Guernseys and, more importantly, stick with the breed.

Modern dairymen want 'invisible' cows. Cows that produce well, go through the parlour each day and do not give trouble. They want productive, fertile, healthy cows and they want a reasonable and diverse supply of good quality bulls available.



We must ensure that the Guernsey breed has these attributes before we can capitalise on any niche market.

### **Sustainability**

Selection for production traits alone can lead to serious functional and health problems. A sustainable breeding programme is characterised by:

- A continuous genetic improvement of productivity to keep the population commercially competitive in relevant areas for production.
- The generation of products which have such value that they are marketable at a profitable farm-gate price.
- A broad definition of breeding objectives to take into account selection for all major economically important traits with a special restriction that fundamental characteristics of fertility, health and survival do not decline.
- Management of inbreeding at such a level that no depression of important traits resulting from increased inbreeding occurs. The effective population size should be monitored to keep it above agreed levels. (Fikse & Philipsson)

In recognition of the need to develop an effective framework for the management of the world's livestock genetic resources and to address the threat of genetic erosion, 109 countries came together in September 2007 at the first International Technical Conference on Animal Genetic Resources for Food and Agriculture held in Interlaken, Switzerland. The Conference, called together by the Food and Agriculture Organisation of the United Nations, resulted in the Interlaken Declaration, which recognised that effective management and the conservation of animal genetic resources depended on and was primarily the responsibility of individual countries.

In a paper given by W.F. Fikse & J. Philipsson, Interbull Centre, Dept. of Animal Breeding and Genetics, Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden, the Guernsey Global Breeding Programme was used as an example of what could be achieved by small population breeds:

*Another example and problem is demonstrated by the Guernsey breed, which has been declining in numbers for some time. In most countries the breeding program is characterized by traditional selection for just production and conformation, the latter leading to bigger and less fertile cows. However, the World Guernsey Cattle Federation has taken the initiative to launch a global breeding program based on sound scientific principles, whereby the genetic diversity is considered in combination with selection for a continuously broader breeding objective (Luff, 2006).....such global efforts are very well worth supporting.*

The Royal Guernsey Agricultural & Horticultural Society and The World Guernsey Cattle Federation are fully committed to ensuring a sustainable future for the breed. This extends not only to continued genetic improvement but also to breed specific products, care for the environment and animal welfare.

The States of Guernsey has been highly commended at many meetings of international animal genetics organisations for its vital contribution to the maintenance of world animal genetic resources through WGCF. At the 10th Annual INTERBULL meeting in Sweden attended by 160 delegates from 24 Countries, the States of Guernsey and the WGCF Secretariat were recognised among six distinguished supporters and collaborators. Continued States support for the science-based activities of WGCF and RGA&HS is seen as crucial.

The unprecedented success of the Island breed improvement policy is attracting attention from dairy farmers and industries around the world. Island bull semen has been exported to USA (the bull had to be exported to UK for collection) where there is strong interest in our more robust Island cattle. Interest has been expressed from China and the Netherlands while English breeders are hoping that the present difficulties with semen export to UK can be resolved.

Island farmers will need to consider how to capitalise on this renewed enthusiasm for their cattle. This however cannot be at the expense of their main objective, which is to ensure a continuous supply of milk and dairy products to local consumers.

**The potential for a great future**

The Global Guernsey breed has the potential to achieve all the requirements of a sustainable programme. Island herds have embraced all the elements of such a programme and are ready to continue to adapt and change as new developments arise.

Island farmers believe that they have one of the finest dairy breeds in the world. In a global context there are dedicated people working for Guernsey breed associations and the breed has the best scientific backing that it could possibly hope for. These people are there to help make the changes that could ensure a really exciting future.

In short, the Guernsey has a lot to lose and also an opportunity to improve its fortunes, flourish in numbers and regain the place that has been slipping away from it in the commercial dairy sector as a supplier of quality milk products to a discerning market sector.

Guernsey is immensely proud of its icon dairy breed. Our people, government and farmers stand foursquare behind it. We have a deep interest in the commercial fortunes of our Island and its cattle. For centuries Guernseymen have had to adapt and change in order to survive. That applies to our cattle just as much as to any other aspect of island life.

(February 2014)

## Guernsey Cattle into the Future

Dr Maurice Bichard<sup>1</sup> (Honorary Member, RGA&HS and EGCS)

### Background

The Guernsey breed developed its unique characteristics over centuries on the Island and was subsequently spread to Britain, North America and several other English-speaking countries. This work was accomplished by breeders before the era of modern genetics which evolved the scientific principles of efficient improvement programmes during the 1950s.

Regrettably the breed's popularity has declined in all overseas countries in the past half-century. This has occurred during the relentless drive to lower production costs for all farm outputs. The Guernsey, along with the once favourite Shorthorn and Scottish Ayrshire, has lost ground mainly to the Holstein-Friesian. The main reason has been the Holstein's ability to produce high yields of milk, fat and protein on intensive feeding regimes, often involving high cereal diets.

Breed improvement programmes based upon quantitative genetic principles have been easy to adopt within this numerically large breed. As a result, cooperatives or companies around the world continue to compete with each other to achieve annual improvement in efficiency of close to 2% per year and make this available to commercial herd owners via semen sales. By contrast, the tiny populations of Guernsey cattle numbered in thousands, not millions, largely failed to devise and implement genetically sound programmes during the period 1950-2000.

In the absence of these we have witnessed a variety of less efficient schemes. The concept of 'testing' young bulls through an initial crop of 40-100 of their AI-bred daughters, milked in many herds, was copied from the larger breeds. But while the Holstein populations then proceeded to use the best of these 'proven' sires to produce most of their replacement heifers, this was not feasible in our numerically small breed. We could not accurately 'test' more than a very few young bulls each year. The result was a limited choice, based on a not very reliable test, with the best 'proven sires' being over-used. In addition, the breeders continued their traditional practice of judging cows in the show ring and taking sons from the winners because they lacked the involvement of independent technical teams basing their judgement on the evolving science.

The RGA&HS and the States received several reports on improving the Island population (the last by Dr Maurice Bichard in 1996). Meanwhile the WGCF, through its 3-yearly world conferences supplemented by frequent contact with the world's top geneticists, worked to evolve a global programme for the breed following the initial suggestion at the 1992 conference on the Island. A firm proposal (Global Guernsey Breeding Programme) was debated at the 2001 conference. The Island and England decided to go ahead, based on principles laid down by Professors John Woolliams (Edinburgh) and Jan Philipsson (Uppsala) and Dr Bichard. The pilot GGBP began in 2001. It has been judged a clear success by both societies and the scientists, improving the breed at an acceptable rate in most production traits but also in conformation of udders, feet and legs.

This success has been greatly helped by the willingness of most of the Island's herd owners to accept the broad principles of the programme and to work together on its implementation. Today some two-thirds of all their females are sired by GGBP-selected bulls. Most of the remainder will be sired by the sons of such bulls.

The States has also been an important influence through its Agricultural Adviser and its financial support for the artificial insemination service and herd recording; also through its annual grant to the WCGF which has enabled the Secretary to keep in close touch with breeders in other countries and many of the world's top animal scientists.

Dr Bichard reviewed the GGBP's successes at the 2010 World Conference in Canada but both he and Prof Philipsson failed to persuade breeders in the other countries (USA, Canada, Australia, New Zealand and

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S Africa) to participate in GGBP. Of course there would undoubtedly be difficulties in running a truly global programme among all seven populations due to variable production environments and market demands and veterinary restrictions on semen movement between countries of different health status. But the fundamental reason for not joining seems to be an unwillingness of members of each national association to adopt a cooperative approach to breed improvement. Rather than unite to compete against other breeds, they seem to prefer their traditional competition among themselves – often doing this in the show ring.

As an aside, the Jersey breed has been more fortunate. The AI organisations, working with significant populations in USA, New Zealand and Denmark, have developed modern programmes and made good progress. Semen from these has helped the breed to become the main producer of 'quality' milk in both USA and UK. So now the Jersey Island population, in spite of being much slower than Guernsey to address the problems of a tiny closed unit, has at last gained access to these overseas programmes. As a result their herd owners have no need to run any formal breed improvement scheme themselves.

### **The Pilot GGBP**

GGBP has been guided by a joint management committee meeting twice a year and administered through the English and Island societies. These have shared responsibility for selecting bulls and supplying semen to each other, originally in quantities reflecting their respective cow numbers (2:1). They accepted to base selection on a Guernsey Merit Index (GMI) where breeding values for production and type traits were weighted in an agreed combination. English and Island-born bulls have been supplemented by semen from a small number of US bulls.

In England, EGCS has owned the bulls and arranged custom collection at commercial AI centres. Semen sales are made by Society staff to pedigree and non-registered herds in competition with AI companies (Genus, Semex and others), and at the Society's risk. On the Island, the States has owned the bulls, reared them, collected semen on a dedicated centre and inseminated members' cows using its own staff.

### **The Next Stage**

Starting in 2002, the pilot GGBP took time to function properly but has broadly achieved its intended form, delivering a useful rate of genetic improvement in both production and type traits. Where are we now? What are the problems to be tackled in the next 10 years and how capable is the current GGPB of doing this?

Sustainability is a much over-used word, but in the context of a breed improvement programme we may specify several characteristics.

- a broad definition of breeding objectives for all economically important traits while maintaining fertility, health and survival
- continuous genetic improvement in productivity to keep the breed commercially competitive through products which are marketable at a profit
- management of inbreeding, both to avoid depressing fitness traits and to maintain genetic variation on which future improvement depends.

### **Improvement goals**

The goals in GGBP were originally chosen according to herd owners' perception of the traits which mattered to them within the then current capability of the data collection and processing organisations. These were milk yield, fat and protein percentages, somatic cell count (indicating udder health and milk quality), feet, legs and udder conformation.

These goals now need revision

- because of our success in the past 10 years. For example, we should define more clearly what percentages of fat and protein are wanted by the markets. Should we aim to stabilise at current levels?
- because of newly perceived problems. For example, should we reduce our selection pressure on milk yield? Some herd owners and consumers believe that we are stressing our cows too far and high yields have been associated with reduced fertility and shorter herd life.
- because of new technology which allows us to target additional goals. For example, new statistical analysis have provided us with predictions of individual breeding values for female fertility. New laboratory assays can easily give us new milk compositional traits (fatty acids, proteins, hormones). With more data from routine veterinary or hoof trimming visits, we might be able to put selection pressure to increase resistance to milk fever or other illnesses.

### **The selection criterion – Guernsey Merit Index**

Given that we have several items of information which predict components of an individual's breeding worth with varying reliability, these need to be combined when finally choosing among candidates. Statistically the optimum way is to weight these estimated breeding values (or Predicted Transmitting Abilities) into a Merit Index value. Superiority in one trait is allowed to compensate for deficiency in another, taking account of how heritable they are and what importance they have been assigned.

In practice this has not yet been fully achieved. Herd owners still place too much emphasis on single items

- the visual impression of an animal on one day
- their overall impression of several daughters
- their memory of its dam or other female ancestors
- insisting that the PTA for a particular trait is strongly positive

A specific example is the insistence on a minimum 85 point visual assessment before a cow may be considered as a bull dam. In August 2014 two new merit indices (Profitable Lifetime Index and Spring Calving Index) will be adopted for UK farms using the most up to date information on values for 35 individual production and type traits. It is possible that our breed might be better moving to one of these.

### **Recording schemes**

In dairy cattle breeding the performance records on which genetic decisions are based have been provided by herd owners who collect them primarily for their own management purposes and by the milk laboratories which have fed back information on milk composition. Continuing with this system may restrict the available records below the optimum if new data are not perceived to be of sufficient interest to the collecting herd or agency but could be of value in aggregate for the breed. In Scandinavia all veterinary observations are recorded and made available to the data processing team, thus enabling selection for health traits. The Island herds are ideally suited for such a development since they are serviced by very few veterinarians and are already on a single recording programme (currently with National Milk Records). We should be discussing with NMR and the veterinarians how the current programme could be made more useful by routinely recording new traits like disease incidence and extra milk analysis. This may be more difficult in the UK.

### **Implementation**

Within such small populations it is important to maximise and, more or less, equalise the use of the agreed number of selected young sires and hence their representation among replacement heifers. Where non-selected bulls leave daughters, as for example when a natural service bull is run for convenience with heifers, they should be of comparable merit.

Since a major driver of genetic progress is the use of the best cows to provide these bulls, it is important to select cows based on their predicted genetic merit and to do this early in their lives. Waiting until they have many years in a herd does not increase the reliability of our predictions by much but it does delay the time when their desirable genes are spread through the population.

### **Inbreeding**

All the aspects considered above control the rate at which progress will be made in the short term. There is unfortunately a conflict between maximising short-term gains and preserving the potential to continue with long-term improvement. If only the best sire is used, then all the next generation's cows will be his daughters and a closed population will rapidly lose useful variability through inbreeding.

Hence, in our choice of young sires (and of the bull dams which produce them) we have to consider not only the predicted merit of each one but also their total number and their genetic relationships with each other and with the population of females. In the past 10 years this was attempted through an informal aim by the GGBP Management Committee at its 6-monthly meetings to limit the number of sons selected from any one bull sire and limit the number of straws collected from each. Unsurprisingly this has not proved fully effective. The number of GGBP bulls used has sometimes deviated from the plan because of lack of supply and (in England) lack of funds to rear them and collect semen. Decisions on the numbers of straws to release have been influenced by customer demand, the need to keep down costs and the excess amounts held for possible export or sale when proven.

The recent estimates of inbreeding accumulation in the Island population by Dr Roden and in the overall breed by Prof Philipsson and colleagues at Interbull, are a little too high for comfort at around 1% per generation. Fortunately we now have some new statistical software (EVA and EVA inbred) which can help us manage inbreeding more precisely by including relationship data in our selection procedures.

### **Necessary Changes**

Based upon our first 10 years' experience I believe that the following changes need to be implemented in the second phase of GGBP:-

- Performance recording needs to become more comprehensive, particularly to include more detail on health, fertility and survival traits.
- Improvement goals need to be reconsidered in the light of progress already made, market demands, public perception of production systems and our ability to estimate breeding values for new traits. From this a new GMI should be formulated.
- Selection of bull dams, and later their sons, needs to be based more closely on their ranking on the agreed GMI.
- The target number of young bulls needs to be reconsidered based upon both operating costs and inbreeding consequences, and then adhered to more strictly. The number of straws released per bull to the English and Island populations must be agreed within this framework.
- Selection of young bulls (and hence of potential bull dams) must in future be based upon a combination of their GMI values and their genetic relationships to each other and the cow populations. (This will involve deciding a target rate of inbreeding and using new software to manage it.)

### **External Developments**

- The decision by DEFRA not to allow shipments of semen from the Island to the UK until these are processed in an EU-approved centre is posing new problems for both groups of farmers. Unless a solution can be found, the English society will have to rear and use more of their own bulls or purchase more semen from USA. While Island herds can continue to import semen from English bulls, this will now have to be purchased rather than exchanged. EGCS might be less interested in collaborating since it can no longer access Island genetics so easily.

- Interbull, which provides information services to breeds worldwide from its centre in Sweden, has very recently proposed to help our breed by offering a pioneering enhancement to facilitate a more integrated and worldwide approach to the improvement programme. The Centre will become directly involved by bringing together data from all countries to assist the selection of new breeding males and females. A web portal will be provided to help decision-making in each country.
- the world's major cattle breeds are now making use of a new source of information on the expected BV of individuals. This is the GENOMIC BV, derived from an analysis of the actual genetic material found in the individual's chromosomes – based upon a sample of tissue.

Our dairy statisticians have derived their prediction methods by finding which gene patterns (at several thousand sites along the chromosomes) are best correlated with accurately measured BVs of widely-used bulls. But our problem in the Guernsey breed is that we just do not have sufficient proven bulls of high reliability so we cannot yet get accurate Genomic BVs.

Of course we are not alone, there are many other numerically small breeds in the world. Scientists and the grant-giving bodies which fund their work, would like to assist us. Our breed was asked to join a research project funded by the European Union which aims to look for solutions. Gene2Farm brings together research groups in six countries and eleven breeders' associations or data processing centres. The work began in January 2012 and has a further 24 months to go with a budget of some 4 million Euros. WGCF was originally invited to join but as the Island is not a EU member our participation is under the name of EGCS. Dr Maurice Bichard is the official member and works closely with Bill Luff.

We shall first try to maximise the number of proven bulls from around the world which have DNA analysis. This is being helped by generous contributions of funds and laboratory work in North America, and these results will be made available to the project. The Gene2Farm budget is adding a further 120K Euros (£100K) to analyse more UK and Island individuals (bulls and cows) in Edinburgh.

But even when we have included all available samples our numbers will still be too small. Researchers will be exploring other ways, including the possible use of data from other breeds, to enhance the predictive accuracy of the technique.

We expect to end up with new statistical procedures for use by our data processing centres (particularly the Egenes centre in Edinburgh) and advice on how to incorporate Genomic methods into our improvement programmes. We cannot, at this stage, predict what increases in accuracy these might offer over our current system based on actual production data of individuals and all available relatives.

## Responsibility

Responsibility for the breed in the Island lies jointly with the owners of the cattle (and their herdbook organisation the RGA&HS) and with the States. There is a need to provide fresh milk and some dairy products for Island consumers. While this could in theory be filled by imports, it can be argued that local milk from this well-known breed grazing in its fields has become firmly established as part of the Island's brand. But in addition there is a binding international obligation on all countries to conserve their native livestock resources. Clearly the most efficient form of conservation is to keep the population commercially active rather than merely maintaining it as an historic relic (a 'rare breed').

Responsibility in England lies with herd owners and EGCS. (Whether the UK Government has any obligation to maintain the breed under the Rio convention is not clear to me). EGCS, which started off by contributing some two-thirds of the cattle in the pilot GGBP, has unfortunately been losing members and herds in the difficult economic conditions of the UK dairy industry which still persist. In part for this reason, but also because members are scattered widely through England, the Society has found it difficult to create a true cooperative approach to GGBP. The Island farmers clearly have advantages:

- there are few of them
- they live in close proximity and can come together easily



- they are used to working together to present their case to their government on many aspects of their farming business
- they are all constrained to keep the one breed
- they all record with a single scheme and receive an insemination service from operators who feel an integral part of GGBP
- the RGA is not exposed to the financial risks of buying bulls and recouping its costs from semen sales or membership fees
- they have been able to negotiate their milk price with a government which has an interest in a continuing, stable, dairy herd.

But contrary to the views of some EGCS members, they are not handed the GGBP on a plate, they have increasingly been required to pay for the services provided by government. What is more, the Island Government is finding it necessary to question every part of the net cost of supporting the Island farmers and future GGBP costs must all be justified.

## Conclusion

We must obviously ask whether EGCS and RGA have the ability to tackle the changes identified above as necessary for the future of the breed. These involve an increasing degree of control of key decisions on which bulls to use and how much. This will involve 'buy-in' from the majority of herd owners. Such 'buy-in' may be achieved by continuous discussions, technical presentations and by 'nudging' the States, EGCS or RGA, making it advantageous to individuals to opt for procedures which work in favour of the programme. In summary, we need to become more professional in managing and implementing the next phase of GGBP.

There must now be real doubts whether EGCS can continue to play an equal role in the future programme. Its limited financial resources mean that it cannot overcome the problems of creating a truly cooperative scheme from the surviving scattered members who have traditionally competed with each other. (Other British breed societies, Holstein and Jersey, continue in their traditional ways but the engines of breed improvement have been taken over by the AI companies.) EGCS has failed to develop a reliable system for ensuring a steady supply of semen from young bulls born to its top GMI cows and its semen sales have depended too much on the preferences of uncommitted customers.

In conclusion, while it is hoped that the Island and English societies will continue to collaborate, it seems inevitable that the primary responsibility for running a sustainable breeding programme for the breed will move to the Island. The Islanders hope to continue to benefit from access to the worldwide resources of the breed, though this seems likely to be more difficult as the UK and US populations either mark time or move in directions which do not coincide with their aims.

The herd owners can count upon continuing support from their Herdbook Committee with the deep understanding and widespread scientific contacts of the WGCF Secretary. It is to be hoped that the States can appreciate their new situation and stand alongside the RGA&HS to ensure the future of the Guernsey breed.

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