

**Brexit/Breeding, Risk Taking, Agenda, Vision and Efficiency** – these five buzzwords shall be the way in which we create a **brave** new world in dairying.

Uncertainty and volatility are two words which can be used to describe recent times for UK dairy farming. It is as a result of 'Brexit', the vote which took place in June for the UK to end its membership within the EU, which is responsible for the majority of this uncertainty, although it is true that this uncertainty has existed for a period of time prior to this due to the volatility of milk prices for farmers. We need to create a brave new world for UK dairying, to ensure the sustainability of our industry; for the purpose of this essay the five main introductory buzz words shall be discussed in more detail to show that a brave new world may not be so far in the distance.

What will the UK farmer remember most from 2016? The unforeseen result of the EU referendum on the 23<sup>rd</sup> June which meant the UK's membership within the EU was indeed to come to an end - many farmers were happy with this, many were confused, but what does Brexit really mean for UK dairy farming and how will it affect the future? Dairy UK Chief Executive Dr Judith Bryans made it clear that trade was a core element of the industry's future, "the UK dairy industry has tremendous potential for growth on the global stage," she said, "and the Government must provide the right framework to help make our sector more resilient, competitive and profitable". The prospect of exiting from the EU faces UK farmers with a number of additional challenges, to add to those they are already coping with, and increases the uncertainties that they face. It is difficult to predict the consequences of 'Brexit' for agriculture with any precision, given the absence of contingency plans by the UK Government and the uncertainties that follow the vote to leave (Grant, 2016). These are two very contradicting statements in the respect that there have been no plans made for the future at this point in time and this needs to take place soon. The UK Government needs to start negotiations and ultimately start drawing up/signing free trade deals for our dairy products with the rest of the world. This will be step one in creating a brave new future in dairying.

As previously mentioned, as a result of the volatility of milk prices and the constant struggle to breakeven many farmers have, of course, responded to declining farm incomes by diversifying into a wide range of non-farm activities, from holiday lets through to niche food processing and renewable energy, and to on-farm business units or storage. However, not all farms offer such opportunities and the most lucrative ones have by now been taken up, although this leads on to the topic of 'risk taking'. A risk taker can further be described in business as an entrepreneur – something which has been seen throughout the UK in order to increase productivity and has been successful on a large number of occasions.

Something which could have been considered as taking a risk a number of years ago now was the introduction of genomics in dairy cattle breeding, which also ties in the breeding and efficiency buzz words. Taking a risk with genomics is helping to breed efficient cows to ensure the future of the dairy industry – a risk which has most definitely paid off. On my home farm, Ards Holsteins Northern Ireland, we have fully embraced the genomic era and it really has proven itself within our herd. Genomics have been paramount in our herd for increasing the levels of productivity and efficiency. We start at the top of the PLI list and work our way down looking for the best matings for our cows, placing the emphasis on fertility and components.

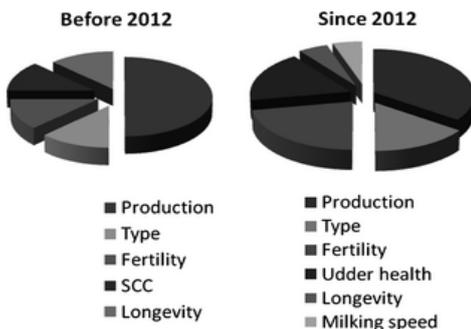


Figure 1: Evolution of the definition of the total merit index in the French Holstein breed (2012) (Boichard *et al.*, 2015).

In France, the overall weight of production decreased from 50% to 35% (Figure 1). This change was mainly motivated by the need to restrict the genetic response in production and to place more emphasis on fertility and mastitis resistance (Boichard *et al.*, 2015). The same trend is being seen in the UK with more emphasis being

placed on health traits, and this is what is needed on the agenda for a brave new future. PLI is a very important figure in selecting bulls and the benefits of the genetic gain lie far more in the traits which are difficult to measure early in a bull's life than in the production traits. This includes traits such as longevity, fertility and disease resistance. These longevity and health traits are tending to be selected now as opposed to absolute type, as they are key drivers for dairy farmers who want to improve the efficiency of their businesses for the long term.

Breeding for efficiency should be placed high on the agenda for building a brave new future in dairying. Each individual business owner/farmer must set out a vision of what direction they wish their future to go and outline an agenda of how they are going to reach that point. So what exactly might that vision be? Sally Uren writes in the 'Dairy Forum for the Future' that the vision is a vibrant UK dairy industry that enables people, environment and businesses to thrive, covering issues such as working practices, innovation, skills, environmental stewardship and animal welfare. The best way for dairy businesses to thrive is with a vision to breed easily managed, healthy, efficient cows. Indeed the trend seen in Figure 1 is exactly that which is observed in many countries, the drift away from breeding for 'show type' to breed attractive herd cows that would sell well in the commercial market place – average sized cows with great width and feet/legs with good fertility, components and functional mammary systems. Genomics make this easier to achieve. However, it takes good management with attention to nutrition and cow comfort to get the most out of these top genomics/genetics, which links to the animal welfare reference in Uren's vision. Efficient management of the herd is the only way to reach the maximum potential that genomics offer.

Selling calved heifers is a big part of our business at home and is definitely something that we aim to do regularly. A vision of my own, and indeed something which I believe would be very beneficial to all dairy farms, is genomic testing every heifer calf born on farm. This should increase the rate of genetic gain between generations as matings can be carried out more effectively. Through testing all females, it will also make it clearer which ones should be sold as calved heifers, whilst keeping the top ones for the herd. Genomics and genetics have progressed so much that Immunity+ and TB Advantage now exist. Immunity+ is something that should be seriously considered in any dairy farming business agenda/vision and something that has tremendous potential. Immunity+ sired animals have genetics which have been proven to provide robust immune systems capable of dealing with a wide variety of potential disease challenges, both viral and bacterial in nature, encompassing nearly all major diseases that have an economic impact on farm (Semex, 2016). Immunity+ sired daughters have higher quality colostrum which increases immunity to infection from the very beginning. TB Advantage is a new genetic index published by AHDB Dairy to help dairy farmers make informed decisions to breed cows which have an improved resistance to bovine TB. TB is one of the major threats to UK dairying and this is something which should be seriously considered to be part of the dairying agenda/vision in order to create a brave new future in dairying. New innovative ideas and technology like these are key to breeding that healthy, efficient cow that has been discussed previously.

To conclude, if you want to go fast, go alone; if you want to go further, go together. **Brexit/Breeding, Risk Taking, Agenda, Vision and Efficiency** ideas and scenarios between farmers should be shared and discussed. The bravest future for dairying will only be achieved if dairy farmers work together to secure the future of our industry. A farmer has to remain an optimist or he wouldn't still be a farmer! The UK dairy industry has huge potential for growth on a global stage, whether it is genetics in cattle or milk products, and with determination and ambition a brave new future will be achieved.

#### Reference List

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