

“How we can create a brave new world in dairying”

Introduction:

Looking back to 2016, dairy producer confidence was fragile. But ask me now what it is like to be a dairy farmer in 2050? Well, this year we hit a new milestone, the herd averaged 25,000 litres and we have signed a contract to be sole liquid milk supplier to a national coffee house chain. In this efficiency-focused world, we have turned our waste into money, and the milk we market is a more highly tailored and enriched product than ever, with our biggest competitor now being synthetic products. In the past 30 years our dairy farming population, practices and even more so our expectations have changed. Here is the brave new world, intrigued to know how we got here?

Growing our resilience:

Our past downturns in milk have given us something; they have made us greater negotiators and we are now more financially literate than ever. We have gained skills from preparing budgets to demonstrating financial control. We have worked closer with retailers to produce contracts that reduce the risk of a farm gate milk collapse, some with fixed forward milk cheques for over twelve months, and we have made sure farmers are on contracts suited to their resource and system.

Learning from our neighbouring producers, the poultry producer, we have become kings of data. If it is measurable we measure it, and if we can attribute a value to it we will. In doing so we have gained robust evidence proving where we are today, whilst providing backing for the future changes and investments we want to make. Once, people may have described a good farmer as someone with a tidy farm and nice looking cows, today you need to be a businessman, know your figures and be actively engaged in benchmarking with other producers.

Changes to farming methods:

Our breeding strategy has changed considerably; heavy adoption of *in vitro* fertilisation (IVF) has allowed us to produce female embryos from the top 5% of our animals, increasing the overall genetic merit of the herd, underpinning the growth in our yields to 25,000 litres. All other animals on the farm are now either used as recipients or bred to beef, the beef calves now providing much more than a 13th milk cheque, are sold through an integrated scheme. The scheme provides us with feedback on how fast these animals have grown and finished, helping us to better exploit what was once seen only as a by-product of the dairy.

Bulling cows are no longer visually heat detected or by transponders. Instead, through process innovation, hormone levels in milk are now tested every day by an on farm smart computer. This provides information on cows that are bulling, in calf or even cystic. It also provides information on mastitis presence.

At farm level, GHG emissions account for approximately three quarters of the overall carbon footprint for liquid milk. With evidence from AHDB Dairy that a lower carbon footprint is associated with reduced production costs, we are now self sufficient in supplying electricity and fuel for machinery through bio-methane production from an on farm anaerobic digester fuelled by the farm's slurry.

Consumers' growing interest in the 'back story' of dairy production and how it relates to their lifestyle has led to extreme limited use of antibiotics in dairy production. Our breeding decisions now take into greater account animal's genomic wellness and immunity traits. We strive daily to provide

the 'perfect environment' and ensure healthy fit for purpose cows, e.g. access to 10cm of water trough space per cow and deep sand bedding with sand being separated, cleaned and recycled, to uphold this limited use requirement.

Together we have a voice; together we have power:

In the past thirty years, members of the dairy industry have come together to be the envy of other farm producers. At producer level we have exploited social media to the full. Farmers are posting and tweeting every minute of every day about their day-to-day activities, educating the public and spreading the true story of how we make our world class dairy produce.

The Dairy Council, AHDB and RABDF have come together to fund a multi-million pound integrated marketing campaign spread over a twenty year period that has safeguarded demand and provided pivotal education to the population. Greater research into the health benefits of milk has given us new benefits to not only boast about and grow the volume of our products sold but also, importantly, increase the value they achieve.

Conclusion:

So we made it to 2050, and yes, we are feeding 9.6 billion people. We have not looked for revolutions in how we do things, but instead looked at reinterpreting the farming practices we have previously used. Our population of dairy farmers have seen the invisible, felt the intangible and achieved the impossible. Today we do have a vibrant industry that enables people, the environment and businesses to thrive.