SUBMISSION

To:	New Zealand Productivity Commission
Submission on:	Technological Change and the Future of Work
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SUBMISSION TO THE NEW ZEALAND PRODUCTIVITY COMMISSION ON "TECHNOLOGICAL CHANGE AND THE FUTURE OF WORK"

1. INTRODUCTION

1.1. Federated Farmers welcomes the opportunity to submit to the New Zealand Productivity Commission on the issues paper "Technological Change and the Future of Work". Federated Farmers represents farmers in the dairy, meat and wool and arable farmers in New Zealand. We are supported by a voluntary membership paid by farmers from these sectors.

1.2. Many of our members employ staff with some enterprises being relatively large. Farm consolidation and multiple farm ownership is an increasing characteristic of the dairy sector. The total number of people employed has increased from 14,800 to 25,200 since 2000 while the number of individual enterprises has dropped by half. This means there is a much higher proportion are employed as waged or salaried workers as opposed to self-employed or supporting family businesses.

2. GENERAL COMMENTS

2.1. New Zealand farmers, in an international context are often seen as early adopters of technology and technological uptake has been partly responsible for New Zealand farmers being some of the most efficient in the world on a number of indicators. In the relatively recent past, a vast array of technological advancements have helped drive production and productivity in wester farming.

2.2. Arguably, many people's minds turn to advancements in engineering and machinery as the type of technological development that most effects jobs and productivity. This sort of technology has certainly had a significant effect in farming with better and larger machinery (for example tractors, implements and milking machines) improving productivity over time.

2.3. However, just as important has been the wide availability of synthetic fertiliser and huge leaps forward in scientific knowledge in plant breeding, animal genetics and agronomic/animal husbandry techniques. When we add the development of more effective, more selective and generally less harmful agricultural chemistry such as modern pesticides, production and productivity on farms has increased dramatically.

3. ROBOTIC MILKING PLATFORMS

3.1. Given the majority of on-farm employment in New Zealand is contained on dairy farms, it is vital to look at the availability and uptake of more mechanisation on the dairy farm. This would appear to be the best short-term solution to address labour shortages and to be able to improve productivity. Robotic dairy sheds that milk cows with no or limited human involvement are certainly not an uncommon occurrence in Northern Europe so the technology in a general sense is not particularly revolutionary.

3.2. New Zealand's 12,000 dairy farmers have as yet not demonstrated significant update of the available technology. There are currently approximately 25 fully robotic dairy sheds operating in New Zealand. A number of barriers to their uptake in New Zealand could be speculated on but probably the major issues at this stage are currently high cost and the fact that they do not integrate well with pasture based farming that is common to New Zealand.

3.3. Farmers have shown they are prepared to invest where there is a clear value position but that may be lacking for some farmers especially in the case of those for whom debt costs are one of their biggest expenses. The growth in relatively recent growth in the dairy industry has meant many farmers that are newly converted are carrying higher levels of debt that would have been the norm. This may be an impediment to investment in expensive and new (to New Zealand) technology, where there is no clear value proposition for the investment.

3.4. There is also likely there is some resistance to move away from pasture based dairy farming on two fronts. Firstly, negotiating the Resource Management Act requirements for consents to build structures to house cattle on a large scale is not a cheap or easy process and secondly, New Zealand dairy farming reputation is largely built on its reputation of having cows outside, consuming primarily grass. This method of farming emerged when it was the likely the lowest cost form of production in temperate climates like that of New Zealand with milder, dryer winters. However, it also emerged as a point of difference to European and American farming models and has therefore been adopted by the sector as their principle marketing point. That is alongside New Zealand's impeccable reputation for food safety.

3.5. It must also be said that evidence from overseas is that the number of roles on dairy farms are not significantly, or at all, reduced, by the installation of more automated processes in the dairy shed. Though, It may help farmers reduce the number of hours worked by themselves and their staff. A reduction in working hours is consistent with the goals of the industry, implemented through Dairy NZ and Federated Farmers' Sustainable Dairying: Work Place Action plan.

4. AVAILABILITY AND USE OF DATA

4.1. One piece of technology that is being adopted by farmers in large numbers is the collection and use of data about their farming operation. That could be in relation to the identification and performance of the animals or crops but can also apply to the use of staff time and labour. The more information that can be collected and analysed about the tasks to be done on a farm at given time period through the season helps farmers to prioritise crucial jobs and identify staffing needs at various times. This will help farmers to resource their business better as opposed to carrying staff during quitter times of the season and overworking themselves and their staff during busier times.

4.2. This is particularly becoming more possible with the support of tools developed by industry bodies such as Dairy NZ and by the rapid growth, largely due to regulatory factors, of electronic/on-line payroll and time recording programmes.

5. A SKILLED WORKFORCE

5.1. Labour shortage is a significant issue in the primary industry. Historically low unemployment and increased urbanisation has removed much of the natural pool of workers that would have once been available to farm employers and the location of the farm can be an issue. It is often necessary to live on the farm and that means that when a farmer asks someone to come and work for them they are also asking them to move, in many cases away from their family and support network.

5.2. So it is vital the industry is supported to work hard on the attraction of people into the industry, and that a pipeline exists to show those who have an interest the career progression possible on farm. With the increasing use of technology a wide variety of skills will be necessary for farms in the future as and we need a system of training and education that can cater for people already in the industry.

6. ABOUT FEDERATED FARMERS

6.1. Federated Farmers of New Zealand is a primary sector organisation that represents farmers and other farming businesses. Federated Farmers has a long and proud history of representing the needs and interests of New Zealand farmers.

6.2. The Federation aims to add value to its members' businesses. Our key strategic outcomes include the need for New Zealand to provide an economic and social environment within which:

6.3. Our members may operate their businesses in a fair and flexible commercial environment;

6.4. Our members families and their staff have access to services essential to the needs of the rural community; and

6.5. Our members adopt responsible management and environmental practices.

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