



National Certificate of Educational Achievement  
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEA

## **Exemplar for Internal Achievement Standard**

### **Agribusiness Level 2**

This exemplar supports assessment against:

**Achievement Standard 91865**

**Demonstrate understanding of future proofing influences that affect business viability**

An annotated exemplar is an extract of student evidence, with a commentary, to explain key aspects of the standard. It assists teachers to make assessment judgements at the grade boundaries.

New Zealand Qualifications Authority

To support internal assessment

	Grade Boundary: Low Excellence
1.	<p>For Excellence, the student needs to demonstrate comprehensive understanding of future proofing influences that affect business viability.</p> <p>This involves evaluating the short and long-term impact of future proofing influences, predicting impacts both within and beyond the identified business and the consequences of these impacts.</p> <p>The student has explained short-term impacts of future proofing influences such as securing the supply chain and growing a variety of grasses to ensure a safe, high quality range of Gouda products. They also have a contract with Fonterra, who take their excess milk so it is not wasted, and provide the business with another income source (1).</p> <p>The student has explained long-term impacts of future proofing influences, such as low stock numbers and planting more trees to help the environment, and sustainably recycling the waste water and whey back onto the land. Additionally, capital machinery reducing the need for human labour and succession of ownership have been explained (2).</p> <p>The student has predicted impacts within Meyer Cheese like investing in new technology, short-term economic influences, environmental and ethical awareness, a biological influence, and scientific research and legal factors (3). The positive and negative consequences of these impacts within the business have been explained by the student (4).</p> <p>The student has predicted impacts beyond Meyer Cheese involving long-term economic influences and cultural and social influences (5).</p> <p>Some positive consequences of these impacts beyond the business have been mentioned (6).</p> <p>For a more secure Excellence, the student could provide more comprehensive understanding of the positive consequences of the impacts beyond the business, and also consider the possible negative impacts of these consequences.</p>

Introduction ...

One of the key methods used by Meyer Cheese to keep the product safe for themselves and customers is running their own facilities. By doing this they can monitor the cheese and know its origins from being formed inside the cow's udder to the transport around NZ, and exported to Australia. This process begins on Meyer Cheese's two dairy farms, where cows are raised on a variety of grasses that are both drought resistant and flavoursome; milk product can often be bland if only one type of grass is present. This means the cheese is of a higher quality and more is bought by their target higher income consumers ensuring sustainability and a higher demand, and therefore a higher supply of their cheese, ensuring their viability.

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Cows are farmed in low stock numbers, with many trees, to ensure healthy stock for the future, but also less long-term damage to land through pugging and high nitrogen leaching caused by large numbers of stock. Once the cows are milked by a well-trained team of dairy farmers who all wear protective clothing to prevent contamination, e.g. covered shoes and overalls are always worn when around the milk. 10% of all milk is tested to ensure no contamination such as e-coli occurs, as 100% per ML is needed to pass health standards and continue in business. From here just under half the milk is kept and pasteurized, while the rest is sent to Fonterra. It would not be sustainable to keep 100% because milk gives a fast turnover of profit that is needed to ensure the viability of the business.

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The milk is transported from Meyer Cheese's farms to their cheese making facility, along with sheep and goat's milk which is supplied from farms that are ethical to ensure milk is of the highest quality, and to provide a wider range of cheese choices to consumers. It is then pasteurised to kill harmful microbes in the milk and once again prevent any chance of sickness for consumers of the milk.

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Once all the safety boxes have been checked, the cheese goes through a capital-intensive process. As Meyer Cheese only employ four full time staff, a large amount of the cheese is produced by machinery which works the milk into cheese. This means that Meyer are producing more output per unit of input, meaning the machines can make more cheese faster than humans, saving Meyer Cheese money and keeping them viable.

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Once the curds and whey is separated, the whey and waste water is then irrigated back onto the land. As Miel said, "it can be a problem if this is over-concentrated therefore we have a rotation plan which ensures fields are not irrigated for long periods of time or too frequently. The amount of whey we produce is also small". This shows Meyer Cheese's environmental practices and their desire for a sustainable future on the farm.

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After many labour intensive hours of turning the cheese and shaping it, a large variety of cheeses are produced to meet their markets' demand and ensure viability. Once the cheese is ready it is once again tested for any flaws and contamination, before they are delivered around the country in chilled freight, which are insured in case of any transport issues. "We support our cheese right throughout the transport chain and to the end customer". Some cheese is also exported overseas to Australia to reach a larger market and expand their business. There are no plans to export to other countries in the near future. Exports are currently <5% of all of Meyer Cheese's turnover.

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For Meyer Cheese future proofing means running a profitable business that is viable, sustainable, and in line with their cultural beliefs and values. "Food is future proofing in itself". By doing this, Meyer Cheese creates an environment for staff and customers that is both professional and enjoyable. Creating a business that will continue to run for many years to come, even if Miel were to die, is also a main goal for Meyer Cheese. They record all transactions about all produce supplied. This is to both please the auditor who checks to make sure their business meets all requirements to continue running, and in case someone else has to pick up the business it can be done with ease, future proofing it for years to come. "To create a successful business, you must listen to the people around you", is Miel Meyer's answer for us when asked if he followed the influences of others to future proof his business. For Meyer Cheese these influences include economic, environmental, political, social, ethical, technological, biological and legal, along with profitability, ethics and sustainability.

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Technology can also relate to investing in new machinery that is more cost effective than people, and can make more cheese per hour. This is also future proofing as machines do not need breaks or holidays. For example, they could invest in capital machinery that shapes the Gouda cheese, and applies the wax or natural rind ready for aging. Another machine could cut and package the cheese, reducing the need for labour and human handling of the cheeses and reducing the risk of contamination.

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The benefit of having new machinery is enabling more production to be possible and improving productivity, but workers may lose employment as fewer jobs are needed.

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Economic factors for Meyer Cheese affect the business hugely in the short and long term. Depending on the state of the economy, and how much supply and demand there is for Meyer Cheese, determines what price their cheese can be sold at. Short term, Meyer Cheese have to keep up with demand to prevent a shortage from

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occurring, while avoiding overcompensating and creating a surplus, meaning there is too much cheese produced for Meyer Cheese's market. If either of these situations were to happen, the business would likely suffer a loss in profits.

**Long term**, Meyer Cheese must watch NZ and overseas economies to ensure they can future proof for depressions in the market or changes in general and try to increase their market presence in NZ by implementing a marketing campaign and getting their cheese sold in more speciality cheese and deli retail locations around NZ. Additionally, by increasing production with more capital input as explained for technology, they could look at securing more retail locations in Australia and exporting more cheese to Australia, increasing their market presence there with a marketing and advertising campaign. This would help ensure the long-term viability of the business by securing more retail locations to sell their cheese

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**Environmental/ethical awareness** is an influence for Meyer Cheese "to protect the land so it is here for future generations". This shows they are looking to future proof the environment in the long term. This is done by keeping stocking rates low on each farm and pumping whey back onto the land as mentioned earlier, and fencing waterways and getting on board with healthy rivers, to stop erosion and major nitrogen leaching, which can stay in the land for hundreds of years, and damage future water quality.

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By doing this, pugging damage to soil is reduced, and nutrients taken out of the land through cropping, grazing, etc is re-applied, keeping the land in pristine condition today, and for the future. Public waterways are kept clean, protecting future generations who may use it for swimming.

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**Cultural views within business**, such as only using natural calf rennet, and staying in line with their beliefs is huge for Meyer Cheese as it defines them as a business and will continue to do so for years to come. The cheeses produced are non-vegetarian. As Miel said, "we use a natural calf rennet which is keeping in line with our traditional style". Beyond business, vegetarians will not be able to buy Meyer cheese and will take their business elsewhere to cheese makers that use vegetarian rennet. This is a growing market that Meyer is not currently tapping into and so is a lost opportunity to make more sales and future proof the business.

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**Social influences** are related to aspects such as social media and promoting online, e.g. Facebook, to attract a wider range of people. Social also includes building strong relationships with customers, that will continue to buy the cheese long term, future proofing sales.

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**Biological influences** such as selective breeding means Meyer farms can breed dairy cows with high production rates. This means they produce higher output per unit of input, and in the future stock will continue to be productive and have the same bloodlines. A consequence of this is that Meyer farms will keep the same bloodlines and local breeders will no longer be needed, leading to decreased income for local breeders.

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**Scientific research within business** is done by Meyer Cheese to ensure cheese is up to standard for export. By testing each batch for bacteria to ensure safe milk is being used with no bugs, and testing different combinations of cheeses, Meyer can see which cheeses are most popular among customers in the short term. Another consequence is the retail businesses that Meyer Cheese supplies to could sell more cheese to consumers, therefore making a larger profit, and increasing income.

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**Legal factors within the business** include tax, ACC and company reporting obligations and health and food safety regulations, such as filling out report booklets for every batch of cheese, and making sure all requirements for staff, trucks, factory, etc are met. This avoids a bad review from auditors, or health inspectors which could lead to instant shutdown of a cheese-making business. By doing this Meyer Cheese are protecting and future proofing themselves in the case something goes wrong, e.g. contamination of milk. Problems can be instantly traced, finding what the likely problem was. Meyer's records also help to track any problems. Good reviews from auditors and health inspectors also improves the reputation and business viability of Meyer Cheese.

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Conclusion ...

#### References:

Miel Meyer  
Meyercheese.co.nz  
Fonterra.co.nz

	Grade Boundary: High Merit
2.	<p>For Merit, the student needs to demonstrate in-depth understanding of future proofing influences that affect business viability.</p> <p>This involves giving a thorough explanation of the short and long-term impact of future proofing influences that could affect the viability of an identified business.</p> <p>The student has explained the short-term impacts of an economic influence and biological influence (1).</p> <p>The student has explained the long-term impacts of an economic influence and environmental and ethical influences (2).</p> <p>The student has explained how the short and long-term impacts could affect the viability of Meyer Cheese (3).</p> <p>The student has identified an impact beyond Meyer Cheese involving a long-term economic influence and a consequence (4).</p> <p>The student has identified an impact within Meyer Cheese involving a technological influence and a consequence (5).</p> <p>To reach Excellence, the student could provide further explanation of the predicted economic and technological impacts on Meyer Cheese, and explain the positive and negative consequences of these impacts.</p>

Student 2: High Merit

NZQA Intended for teacher use only

Meyer Cheese is a family owned cheese making business situated in the heart of the Waikato. Originating from modest roots in the south of the Netherlands back in 1976, it has grown into a thriving New Zealand business. The success of the Meyer Cheese company is a product of hard work and a focus on the future of the company by future proofing to ensure its sustainability in the long term.

Some of the major influences that Meyer Cheese think about when future proofing their business are economic, environmental, technological and ethical because they all affect the businesses viability in the long run.

### Economic

Economic influences on a business include tax, interest rates, banks and stock markets. These factors all affect the business in different ways. Interest rates are a very important aspect to consider for any business when planning on taking out a loan with a bank.

Meyer Cheese only exports their Cheese to Australia, this is a choice the business has made to ensure economic viability. In the short term it is easier for them because when exporting goods to another country there are tariffs to pay. Also, there are extra conditions they have to abide by. It saves Meyer trouble in the short term because other larger markets such as USA or China would be difficult markets to gain access to because of the strict conditions. However, this could be impacting the business negatively because they are missing out on selling their products globally and not future proofing the viability of Meyer Cheese.

A long-term impact of exporting elsewhere is the extra cost of investing in larger factories and farms. Although it would be easy enough for them to take out huge loans on these things it may not be financially viable. This is a future proofing choice because they are not risking the success of their business in the long run by taking out a loan on an investment that is not guaranteed to be successful just to make more money now.

If the company was to export elsewhere it would have impacts beyond the business, like putting New Zealand Cheese on a global scale which would reap benefits for our export market as a whole, especially the agricultural sector. However, if Meyer Cheese were to export globally without considering how financially feasible it would be then they could end up not being able to pay off the debt for expanding all of their farms and factories. Ultimately this would not be viable and the business would be forced into bankruptcy.

### Environmental

Environmental influences are huge on the Meyer Cheese business because it is their primary source for their main ingredient of milk. Meyer Cheese has a goal to be environmentally friendly from farm to the supermarket shelf. Environmental influences include what the company is doing to protect the environment and also external effects like the weather and natural disasters that can halt production and decrease viability. A major future proofing concern for Meyer Cheese is how rapidly the environment is changing around us. They must come up with ways on how to combat extreme weather conditions like droughts. One way they have decided to do this on their own farm is by planting more trees. This means that in the short term there is more shade for their cows and also less moisture loss resulting in milk still being able to be produced in harsh weather conditions. This decision also has long term impacts beyond the business because it is beneficial for the well-being of the environment. Planting trees helps to produce more oxygen and remove carbon dioxide from the air which will in turn help to lower the effect of greenhouse gases that are currently doing so much damage to our planet.

Planting more trees, especially streamside also helps to reduce runoff from farms and nitrate leaks into streams and waterways which helps to keep them clean and safe for people and wildlife to make

use of. In attempts to reach their long-term goal of being environmentally friendly all the way to the supermarket shelf, Meyer Cheese are also looking at ways of making sure their packaging is 100% recyclable so that it is not just going to rubbish dumps, it is able to be reused and recycled.

The environmental future proofing measures that the company are taking have great benefits beyond the business for New Zealand as a whole because it contributes to achieving New Zealand's sustainable development goals of protecting our environment. If these measures weren't taken by Meyer Cheese then they would lose a lot of customers because their ethics as a company would not be in line with what some consumers want for their country and planet, and losing these ethically minded customers could affect the sustainability and viability of the business.

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### Biological

Biological influences are anything that affect the function and behaviour of the product, which in this case is both cheese and milk. Biological influences affect the food safety of the Meyer Cheese products making them the biggest threat to viability of the business. To future proof the business against the effects of biological influences Meyer Cheese has implemented good cleaning practices in order to prevent diseases like e-coli spreading to their cheese and milk. They have clear guidelines and procedures in case there is a breach of safety and they run bacterial tests on every batch of cheese produced.

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In the short term, if there is a disease detected in the product then everything on the shelves in supermarkets have to be recalled resulting in a huge loss in profit, stock and a health hazard to consumers. If Meyer Cheese were not to future proof against biological influences on their business people could get sick from eating their products which would cause legal issues for unsafe products. The business would lose credibility and maybe even lose its manufacturing license which would ultimately leave them with a bad reputation and render them bankrupt.

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The number one way that cheese can become contaminated is through human interaction with the cheese. Meyer Cheese has future proofed this by upgrading their technology like cheese cutting machines so that there is less handling of the product by humans. This is also an example of future proofing technological influences. Upgrading technology and having clear procedures to follow means that in the long-term Meyer Cheese is dealing with less cases of unusable cheese and milk batches that would create problems for the business, affecting its viability.

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### Conclusion

Overall, Meyer Cheese keeps up with the latest news and trends in order to ensure their businesses viability for the future. As a business they accept that there are always going to be faults and things to work on but they always do their best to limit the impacts that will affect the business in the future and react to issues by putting policies and procedures in place in order to reduce the risk of it happening again.

### References

- <http://meyer-cheese.co.nz/>
- Miel Meyer

	Grade Boundary: Low Merit
3.	<p>For Merit, the student needs to demonstrate in-depth understanding of future proofing influences that affect business viability.</p> <p>This involves giving a thorough explanation of the short and long-term impact of future proofing influences that could affect the viability of an identified business. The student has explained the short-term impacts of economic influences, ethical milk supply, and securing the supply chain (1).</p> <p>The student has explained the long-term impacts of economic and technological influences, and health and safety, legal influences (2).</p> <p>The student has explained how the short and long-term impacts could affect the economic viability of Meyer Cheese (3).</p> <p>For a more secure Merit, the student could provide further explanation of other aspects of the short- and long-term impacts that could affect the viability of Meyer Cheese, besides profitability.</p> <p>For example, reputation, sustainability of current business practices, sustainability of existing customer base, meeting future needs of consumers, markets, etc.</p>



Meyer Gouda Cheese is a family run Cheese factory that was established in the Netherlands and has since re-established in Waikato, New Zealand. Their biggest export market is Australia as their food safety regulations are very similar to those of New Zealand's. Meyer Gouda Cheese is a family run business, they own their own farms which supply them the cow's milk needed for most of their cheese making. The other milk used for their cheese making is goats and sheep's milk, which is supplied by ethical farms under contract. Their main philosophy as a business is to supply a quality cheese at a price that can be afforded by the majority of the population, not the minority of wealthy people.

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One of the major future proofing issues for Meyer Cheese is food safety. If food safety isn't future proofed by Meyer Cheese it could affect the economic future of the business. If cheese being made were to get contaminated during the manufacturing process it would immediately reduce income as none of the cheese would be able to reach the shelves. For example, every cheese mix has to be tested for e-coli, and if the tests return with a result of 100 or more then cheese is contaminated and has to be recalled and disposed of. This could result in short term impacts such as an increase in costs of production due to Meyer Cheese having to immediately bring in people to fix the problem/pay people to recall the contaminated cheese, as well as paying wages to workers while there is little to no income received as the cheese has to be recalled. Meyer Cheese may lose customers as they are not receiving the cheese they usually order, meaning Meyer Cheese's overall income will decrease making them less sustainable and viable for the future.

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Therefore, to reduce the chance of contamination during the manufacturing process, Meyer Cheese has a rigorous cleaning process in place that is abided by all staff, which includes hair nets, clean hands, and sanitised tools or technology. Each batch of cheese has to be tested, meaning that if any cheese tests higher than the given regulation, Meyer Cheese can immediately find the cheese contaminated before it leaves the factory and dispose of it before it even reaches the shelves. Meyer cheese also future proofs their workers by sending them on courses that improve knowledge of their jobs within the manufacturing process resulting in them becoming more reliable employees, as well as boosting their productivity, so improving the economic viability of Meyer Cheese.

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Technology influences on the business may also be affected by food safety. Meyer Cheese may have to spend more money on upgrading or installing new technology if the contamination of cheese continues to happen, meaning that their costs of production will increase. When using humans to cut cheese or other processes there can be contamination from touching the cheese with hands. In the long term if Meyer Cheese does not upgrade or install new technology contamination may happen more often, meaning that they will lose customers and income meaning that profit would decrease resulting in the business becoming less sustainable for the future. If they choose to upgrade or install new technology this would benefit them majorly in the long term as the new or upgraded technology will be more efficient than the old technology and will boost overall productivity (output per unit of input per hour) meaning that Meyer Cheese would become a more viable business for the future.

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Health and safety regulations can also be an influence for Meyer Cheese when future proofing their business. If Meyer Cheese were to install new technology that cut cheese more efficiently and precisely than the regular workers it would mean that there may be fewer cases of accidents happening when cutting the cheese. This would result in Meyer Cheese's workforce becoming relatively safer as they will no longer be working with knives, and less cheese would be wasted. In the long term, as there are fewer accidents happening, Meyer Cheese would not be required to pay higher ACC levies and fill out health and safety reports, meaning less costs of production and workplace accidents.

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This contributes positively to Meyer Cheese staying a viable business because there will be a very low chance of knife accidents happening, there will be fewer people on sick leave or ACC meaning that production rates will be higher resulting in more income, meaning that Meyer Cheese will be able to stay viable and sustainable.

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Another Influence Meyer Cheese faces when future proofing is the political decisions of governments. For example if the government of Australia put a tariff on imports to help local producers, Meyer Cheese would be faced with long and short-term problems. In the short-term Meyer Cheese would have to increase the price of product exported to Australia as they are now having to cover the costs of the tariff, meaning that quantity demanded would fall. In the long term, as the tariff has resulted in a decrease in quantity demanded, Meyer Cheese would now be receiving less export receipts which means that they have become less able to cover the costs of exporting the cheese on refrigerated cargo boats, resulting in them becoming less viable as a business.

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There is also a huge economic influence on the future proofing decisions of Meyer Cheese when thinking about their security of supply. Fonterra used to supply Meyer Cheese their milk to produce cheese, but Fonterra was inconsistent with their production. Miel Meyer said, "We were never sure whether we would have enough milk". This gave Meyer Cheese many problems that affected the viability of their business. In the short term, if Fonterra didn't supply enough milk, Meyer Cheese would have to immediately halt all cheese production meaning that their productivity would significantly decrease as workers would not be working.

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In the long term, as cheese takes a while to ferment, when the time comes for the cheese to be ready to be sold to customers or contracts, there would be a delay meaning Meyer Cheese would receive no income and possibly have to pay fines for contracts not met as well as still paying regular costs of production such as wages. This would negatively affect Meyer Cheese's viability as they would be less sustainable because of the decrease in income as a result of lack of supply from Fonterra, possibly resulting in Meyer Cheese going out of business. Therefore, they now own the dairy farm that supplies cow's milk for cheese production, as well as supplying to Fonterra for an extra source of income. This also means they can be absolutely sure that the farm meets the ethical concerns of their cheese market. This also means that they are sure that the supply of cow's milk is consistent and if not, they have a contract with Fonterra that states if there was a shortage of milk on the Meyer farm, Fonterra would help out. They also have strict contracts with both sheep and goat milk producing farms that have been inspected by Miel Meyer, making sure they meet ethical standards. Meyer Cheese makes sure not to completely rely on export receipts from various different countries as tariffs are a possibility, so they sell most of their cheese here in New Zealand and some in Australia.

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#### References:

- <http://meyer-cheese.co.nz/>
- Miel Meyer Interview in Agribusiness centre

	Grade Boundary: High Achieved
4.	<p>For Achieved, the student needs to demonstrate understanding of future proofing influences that affect business viability.</p> <p>This involves explaining future proofing influences and how these influences could affect the viability of an identified business.</p> <p>The student has explained a range of future proofing influences for Zealong Tea Estate (1).</p> <p>The impact of these influences on Zealong’s viability have been explained (2). While the student’s main focus has been on profitability, other impacts such as reputation and maintaining the brand have been mentioned.</p> <p>To reach Merit, the student could distinguish between short and long-term impacts of the influences on viability.</p> <p>For example, the student could explain that establishing a second tea plantation would be a long-term commitment and it would take many years to be financially viable (3).</p>

### **Environmental future-proofing influences**

All tea from Zealong Tea Estate is grown, picked and manufactured on one site. This may have an effect on the business in the future if a natural disaster harmed or destroyed the crop. Zealong would have no source of income to keep the business running until the next crop was ready. **Even though the chance of a natural disaster or pest infiltration occurring to damage the crop is small, to make sure Zealong is able to remain viable into the future it would be a good idea for the business to start producing tea on a second plantation elsewhere.**

Another thing Zealong has done to future proof is to develop biodegradable tea bags that are fully organic. This helps them to keep their clean green image. **As consumers care more and more about where their products are coming from, Zealong can say their tea is fully certified organic, right down to the tea bag.**

### **Biological future-proofing influences**

Zealong is fully certified 100% organic so has to take measures to avoid potential hazards that could contaminate the plants. Some of these include having a certain distance between the plants and the boundary to avoid spray drift from neighbouring properties. Another is the pickers regularly using hand wash and sanitiser. **These measures reduce or eliminate the risk of the pickers contaminating the plants which would mean that an annual harvest and also most of the year's revenue is lost. If plants are contaminated this news might be publicised and Zealong's customers might lose confidence in the product which would harm sales and affect future viability of the business.**

### **Economic future-proofing influences**

Zealong production cycle of picking and processing only operates for a total of 60 days a year. This is an economic advantage as they only require pickers and tea masters for the 60 days. **This saves the business money because they don't have to keep a full force of full-time workers on for the whole year. This means that Zealong has more money to put into other things like developing new teas and flavours.**

Another big influence on Zealong's profitability and viability is their brand image. One thing they are doing to protect their brand is being fully certified organic. This means they can market their product to more of a niche market. They market towards people who care a lot about what they consume and where it comes from. So Zealong have a system that gives them the ability to trace the product right back to which block the tea came from, who picked it and which tea master created the tea.

### **Social future-proofing influences**

Because Zealong tea is only picked once a year it doesn't make sense to train local staff. This means that about 75% of their staff is imported from overseas for the harvest period. This includes pickers and tea masters. Zealong hasn't had much input from the local community but they are beginning to train local workers to do the job. This will give Zealong a better image as they will be able to say they are 100% New Zealand owned and operated. **Kiwis will like this and it might increase Zealong's domestic sales, helping its viability.**

### **Technological future-proofing influences**

Technology has had a major effect on Zealong's success. The packing system has recently been automated so the company is able to process more tea at a time, saving money and making more product to sell. Some workers had to be laid off or repositioned due to the automatic packer. There are weather radars in the tea fields. These are linked back to the manager's phone and alert them that frosts or severe weather is on the way. These weather radars were expensive to install but have been very worthwhile because the method Zealong used to use to stop frosts from settling was to fly helicopters at low altitudes to push hot air down onto the plants. This cost \$20,000 each time. Before installing the radars, the manager would look at meteorology data and use their experience and instinct to decide whether it was necessary to put helicopters up. The radars give a more accurate indication of whether it is necessary, **saving the company time and money. It will not take long for the radars to pay for themselves from the savings in helicopter flights.**

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### **Cultural future-proofing influences**

Zealong has tried to keep their method tea making as close to tradition as possible but because of health and safety regulations they had to alter some methods. Zealong respects the culture of traditional tea making by still having tea masters who are involved in the process of making every batch of tea unique. There is a cheaper method of making tea but Zealong is able to appeal to traditional tea drinkers and suppliers because traditional methods have been followed. **These supporters of Zealong's tea making methods will probably continue to buy Zealong tea into the future.**

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### **Conclusion**

Zealong has done many things to ensure the current and future viability of the business. However, the biggest risk the company faces is that they are dependent on one site in Hamilton and if there was a flood or an earthquake, or if the property was contaminated by an outbreak of pests (such as has happened with kiwifruit), Zealong would not be able to produce its tea for at least one season. This would seriously impact on that year's profit and may cause the business to shut down.

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	Grade Boundary: Low Achieved
5.	<p>For Achieved, the student needs to demonstrate understanding of future proofing influences that affect business viability.</p> <p>This involves explaining future proofing influences and how these influences could affect the viability of an identified business.</p> <p>The student has explained future proofing influences for ABC Farms Trust (1). Some of the influences have been linked to the viability of the Trust (2).</p> <p>For a more secure Achieved, the student could further explain how the influences affect the Trust's ability to continue current and future operations. For example, the student could explain the likely impact of staff members continuing to leave their employment because they feel geographically and socially isolated. How does the loss of experience and the need to constantly recruit new employees impact on the business? Similarly, the student could explain the impact of the cost of installing 70 km of fencing on the Trust's ability to meet expenses and liabilities (3).</p>

ABC Farms Trust is a large sheep and beef farm which runs 70% sheep and 30% beef/dairy. This includes 17,000 breeding ewes and 5,000 hoggets.

### **Social influences**

The fact that ABC Farms is structured as a trust influences the decisions made by the farm. Mr and Mrs R are the biggest shareholders in the Trust and their intention is to hand their family business down to their sons in the future. **This ensures the viability of the farm as it is likely to operate for at least one more generation though possibly for future generations too.** A negative social influence is that the farm is in a remote rural area. The couple and their workers do not have a social life because they live more than an hour from any city. Over the years this has affected the morale of several farm workers or their family members and they have resigned. Mr and Mrs R have set up some social activities for staff members so they have people to socialise with.

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### **Biological influences**

Biological factors play a large part in keeping ABC Farms Trust future proof. The biggest biological factor is how good the farm stocks are. Mr R said that he does not pay a premium price to buy stud ewes but he tries to buy ewes with good genetics which will still produce high quality wool and meat. Mr R said that it is important to have medium to high genetics because it helps to sell the products. Customers want to buy products from high quality animals.

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### **Political influences**

Mr and Mrs R cannot control outside influences such as fluctuating milk prices. This means that when they have a good pay-out year they need to save for when the pay-out drops. **This is important because sustaining a steady bank balance ensures the farm can meet its expenses and debts. If they couldn't do this, suppliers or banks might force them out of business.**

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### **Animal welfare influences**

One of the best ways to ensure healthy animals is to feed stock sufficient good quality food. This is a major expense as the Trust runs three huge farms. If the feed quality or quantity is not right the quality of end products is reduced and sales will drop. The farm recently introduced a traceability system so that end products can be traced back to actual animals. This is important in selling their wool and meat because, in case of problems with quality, it allows them to know which animals produced which products.

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### *Biosecurity influences*

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Biosecurity has a major impact on the Trust. New Zealand is very strict on what you can import and export. This means that when Mr and Mrs R export their products overseas they must make sure the products are free from disease. It is important that the farm keeps its good reputation for being disease free and that no diseases or pests are detected at the border. Bad reputation or having to recall products will decrease income and profit.

2

### *Environmental influences*

1

Mr and Mrs R are very concerned to look after the Trust's land, to farm in a clean manner (for example, minimising waste) and to comply with legislation. A big factor affecting ABC Trust is the protecting the waterways. Environment Southland requires the farm to fence off all waterways on the property. The cost of fencing is huge as the farm has over 70 km of waterways which pass through the property.

3

### *Technological influences*

The farm uses old fashioned techniques for most farm jobs. This might be effective currently but may not work in the future. It is important to keep up with the latest technology because it is always changing. If Mr and Mrs R stick with their current practices their farm might not be as productive and profitable as it could be. They might also find it hard to attract or keep staff who might prefer to work on farms with more sophisticated technology or more modern farming methods.

2

### *Legal influences*

1

The farm must adhere to local government bylaws, such as set by Environment Southland, and central government laws, such as for employment and health and safety. Failure to comply with legal requirements could mean that the farm is fined or must appear in court. Any legal consequences could be damaging for the farm financially and could harm the Trust's reputation as an employer or a farm. For example, if ABC Farms Trust became known as a "dirty farmer" because it allowed waterways to be polluted, customers might be unwilling to buy their products and the business might eventually close down.

2



	Grade Boundary: High Not Achieved
6.	<p>For Achieved, the student needs to demonstrate understanding of future proofing influences that affect business viability.</p> <p>This involves explaining future proofing influences and how these influences could affect the viability of an identified business.</p> <p>The student has identified biosecurity and the movement against caged chicken farming as future proofing influences (1).</p> <p>The student has partially explained how the current caged farming practice can impact on sales, implying that converting to free-range farming could improve revenue and profit (2).</p> <p>To reach Achieved, the student should further explain how changing their practice of farming chickens could contribute to the ongoing viability of Southern Chickens. For example, the student could explain how strict biosecurity practices contribute to current and future viability (3).</p> <p>In addition, the student could refer to how improved reputation could contribute to profitability (3).</p>

Student 6: High Not Achieved

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Biosecurity is a huge part of chicken farming because if one chicken in a shed gets a disease the whole shed has to be killed. This is so the disease doesn't spread to other chickens in the shed.

1

If some diseased chicken meat was sold lots of people could get sick and this would be very negative for the chicken farm's reputation.

3

To prevent the spread of disease, when a vehicle comes on site the wheels get sprayed with chemicals to kill bacteria. People do not often walk among the chickens but when they do they must put on different gumboots and put a full body suit on and get sprayed with chemicals so they are sterile. It is necessary for the farm to always have supply of these chemicals and to always be thinking about biosecurity risks so that the chickens remain healthy.

1

Political issues also have a big influence on chicken farms. Southern Chickens run caged chickens and businesses like these are often criticised by animal rights protestors who say that factory farming should be illegal as the chickens are cramped into the sheds and are abused. Protesters can interrupt the production of chickens. They try hard to get the government to bring in new laws and regulations so that only free-range chicken farming is legal.

1

If the chickens aren't treated as they should be, the whole operation will stop. If Southern Chickens want to keep their business running they need to comply with regulations and keep their chickens well fed. To keep a healthy business you need to keep everything above the law. If you don't you will get shut down. If the owners of Southern Chickens hurt, under feed or make their chickens live very poor conditions, they will get bad publicity and have to shut down.

2

Depending on the amount of publicity given to protestors against caged chicken farming, supermarket sales of Southern Cross chickens can drop, losing income and profit for the chicken business. Southern Chickens might need to spend money on upgrading their facilities to free-range. By upgrading the farm and improving its reputation, Southern Chickens will be able to get more money for each chicken. In chicken farming, the more space for chickens you have, the more money you will get.

2

3

However, Southern Chickens could put a large amount of money into increasing capacity but a disease may break out, forcing them to kill all their chickens. This would lose a massive amount of money which could make or break the business.