

Assessment Schedule – 2022**Agricultural and Horticultural Science: Demonstrate understanding of how market forces affect supply of and demand for New Zealand primary products (91530)****Assessment Criteria**

Achievement	Achievement with Merit	Achievement with Excellence
<i>Demonstrating understanding</i> involves explaining how market forces affect supply and demand for New Zealand primary products.	<i>Demonstrating in-depth understanding</i> involves explaining in detail how market forces affect supply and demand for New Zealand primary products, with quantitative data.	<i>Demonstrating comprehensive understanding</i> involves analysing how market forces affect supply and demand for New Zealand primary products, with a focus on the significance and impact of the market forces.

Evidence**Question One:**

Part	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
A	<p>Market forces affecting supply Explains in detail how one market force from the list affects the supply for one primary product. The supply is likely to be represented by a change in quantity, timing, or attributes of the primary product.</p> <p><i>Weather events</i></p> <ul style="list-style-type: none"> • Milk: Droughts reduce the growth of grass, so farmers run short of feed and need to dry off cows early or reduce stock numbers (either sell to the works, or to other farmers). This results in lower quantities of milk and associated products on the market. • Wine: Rain near grape harvest time impacts the ability for good wine to be made. If it is cloudy and overcast, the grapes will have a harder time ripening. They need sunlight. If it rains, the grapes will take on more water, which means the flavours become diluted and the sugar / acid balance that winemakers are looking for becomes unbalanced. With too much rain, the grape berries start to swell and even split. Grape growers then worry about spoilage, mould, and mildew. Rain is also a concern in spring. Grapes are formed from flowers, and heavy rain can knock the blooms off the plant and reduce the size of the crop. Damp conditions can also lead to mildew and other diseases. 	<p>Explains how a chosen market force has affected the supply of a primary product.</p> <p>General response lacking specific supporting evidence or data.</p>	<p>Explains in detail how a chosen market force has affected the supply of a primary product.</p> <p>Uses relevant data to support evidence.</p>	

Price

- Potatoes: Growers are reluctant to sell goods below production cost, but because of the limited shelf life of most primary products, they often have little choice, e.g. potatoes grown for the table market sell for \$500 per tonne. When potatoes grown for processing are struck with 'zebra chip' they can be dumped into supermarkets. Processing potatoes usually get only \$300 per tonne, so these suppliers are happy to receive less than \$500 per tonne.
- Lamb: Farmers receive a premium price for lamb if they can get them to a carcass weight of 17.5kg in time for the UK Christmas market (to the works in early November). The difference in return averages \$20 per head of lamb between early November and early January, which is a significant incentive to alter timing of supply.

Political intervention

- Non-tariff barriers, such as foreign countries having low pest tolerances, make it harder for us to produce to an acceptable standard. This causes less supply into their market due to the standards being hard to meet, or it may mean costs of production are increased to produce an acceptable standard.
- Trade deals being signed between us and a trading partner, such as China, results in the reduction of tariffs. This makes our products less expensive in market, which then causes an increase in demand. It is followed by an increase in volumes of primary products supplied from New Zealand.
- Political instability between large countries, such as China and USA, can cause some nervousness for producers in New Zealand, as they rely on open and free trade. We don't want borders to be closed or tariffs to be added to traded products.

<p>B</p>	<p>Market forces affecting demand</p> <p>The demand is likely to be represented by a change in quantity or the prices paid for the primary product.</p> <p><i>Promotion</i></p> <p>Venison:</p> <ul style="list-style-type: none"> • In Germany consumer tasting opportunities, cooking tips and recipes resulted in a 7% increase in consumer demand. <p>Kiwifruit:</p> <ul style="list-style-type: none"> • Zespri has used tastings in supermarkets to increase the demand for their kiwifruit varieties out in the marketplace. These promotions are usually carried out when Zespri kiwifruit are arriving at a market, as a way of creating consumer excitement. Zespri spends \$150 million a year on marketing and promotion, which continues to grow annually as Zespri continues to push its brand into new markets and cement its position in established markets. • Zespri has invested \$100 million into digital sales and e-commerce. As more consumers are expected to purchase their food in this way, Zespri sees this as an area for further development. In China, 10% of Zespri kiwifruit purchases were made using e-commerce. <p><i>Reliability of supply</i></p> <ul style="list-style-type: none"> • An important requirement in supplying export markets is the ability to meet contract commitments (regular supply in terms of products as commodities, e.g. beef to McDonald's, lamb to supermarket chains), and often to manage a significant volume in order to have any market presence, e.g. Zespri kiwifruit has Northern Hemisphere growers not only to ensure year-round supply, but also because they need to supply significant volumes to have a visible presence in European supermarkets. • Overseas consumers will want to buy lamb throughout the year and the Northern Hemisphere season will naturally dip when New Zealand lamb production is reaching its peak. For the seller, being able to supply consumers with a product year-round is of great benefit. New Zealand's Southern Hemisphere location gives producers a window to introduce their product and start to establish a brand. 	<p>Explains how a chosen market force has affected the demand for a different primary product.</p>	<p>Explains in detail how a chosen market force has affected the demand for a different primary product.</p>	
----------	---	--	--	--

<p>C</p>	<p>Market forces: consumer preference</p> <p>Kiwifruit:</p> <ul style="list-style-type: none"> • Asian palates prefer sweeter and smaller varieties; Kiwifruit Gold meets this preference, and so demand is increasing for this product in many Asian markets. • The taste of kiwifruit is linked more to dry matter than to sugar (brix) measurement; growers are encouraged to alter production techniques in order to increase the proportion of dry matter in their kiwifruit. <p>UK lamb market:</p> <ul style="list-style-type: none"> • Because butchers make cuts based on the weather of the day (steaks and chops on BBQ days, roasts on colder days) butchers in the UK prefer primal cuts (lamb leg / forequarter) so that those decisions can be made over there. • Consumers prefer New Zealand fresh lamb to UK fresh or New Zealand frozen lamb. Using strict meat handling methods, New Zealand lamb can be “fresh chilled” for up to 73 days for delivery to the UK. Higher prices are paid. • Halal-killed meat products are produced so that New Zealand meat is suitable for Muslims (approx. 5% of UK market) without needing further differentiation. This results in increased volumes being demanded as more potential consumers’ needs are catered for. <p>Apples:</p> <ul style="list-style-type: none"> • Traditionally Europe was the main market for New Zealand apples and up until the late 2000s UK and Europe took well over 50% of New Zealand apple exports. With the growth of the Asian markets there has been a change in taste preferences for apples. By 2019 Asian countries had lifted their demand for New Zealand apples and now take 55%, whereas UK and Europe have dropped to 35%. • The Asian market prefers a sweeter apple, with a deep red colour, so varieties of apples grown in New Zealand have been changing to keep up with changes in preference. Traditional varieties such as Braeburn once dominated the apple exports (over 35% of exports in the mid 2000s) but due to changes in taste preferences the export of varieties such as Jazz, Fuji, Eve, and the Pacific Series of apples have increased from roughly 12% in 2005 to 35% in 2019. In that same time period Braeburn exports have dropped to 14%. 	<p>Discusses why or why not the impact of consumer preference is considered significant.</p>	<p>Discusses why or why not the impact of consumer preference is considered significant.</p> <p>The supply is likely to be represented by a change in quantity, timing, or attributes of both the primary products. The demand is likely to be represented by a change in quantity, or the prices paid for both primary products.</p>	<p>Discusses why or why not the impact of consumer preference is considered significant.</p> <p>The answer will be well reasoned with supporting data included.</p> <p>Answers should be well prepared and laid out in a logical order.</p> <p>The significance of consumer preferences discussed is justified in detail, and the impact that it has on the supply and demand for a New Zealand primary product is clearly identified and discussed.</p>
----------	--	---	--	---

N1	N2	A3	A4	M5	M6	E7	E8
Partially explains ONE market force.	Partially explains TWO market forces.	Explains TWO market forces in general terms (one market force weak).	Explains TWO market forces in general terms.	Explains in detail ONE market force (using recent data and / or other evidence). <i>AND</i> Explains ONE market force in general terms.	Explains in detail TWO market forces (using recent data and / or other evidence).	Explains in detail TWO market forces (using recent data and / or other evidence). <i>AND</i> Consumer preference is fully explained, and either supply OR demand is discussed comprehensively, with the other partially discussed.	Explains in detail TWO market forces (using recent data and / or other evidence). <i>AND</i> Consumer preference is fully explained, and supply AND demand is discussed comprehensively.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 2	3 – 4	5 – 6	7 – 8