Assessment Schedule - 2016

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
"Demonstrate understanding" involves explaining how market forces affect supply and demand for New Zealand primary products.	"Demonstrate in-depth understanding" involves explaining in detail how market forces affect supply and demand for New Zealand primary products, with quantitative data.	"Demonstrate comprehensive understanding" 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.

Question One: Market forces affecting the supply of primary products

Sample evidence

Note: Specific data (prices, etc) for Merit can be provided on the graph or in written answers.

Exchange rate

- The drop in the NZD/USD rate from \$0.82 to \$0.75 gives farmers approximately NZ\$7 more per head of lamb at the farm gate. The increase in income will mean farmers will want to supply more.
- While the exchange rate can play a large role in determining the payout farmers receive, in recent years, despite a strengthening \$NZ (up to US\$0.83 in April 2014), the payout received by farmers has remained favourable. They would not be looking at changing their production, as they have committed financially and physically to this product, and any other product produced would need to be exported, and would face the same unfavourable exchange rate.

Market trends

• Recent market trends in the price paid to farmers for milk solids have had a greater effect on the supply of milk than either the exchange rate or seasonality. Farmers are very responsive to farm gate prices. Dairy farmers have a number of options to quickly increase their level of production if the outlook appears favourable. The increase in large-scale conversions from sheep, beef, and forestry operations over the past decade is a result of higher returns having been paid to dairy farmers. This has been a major factor in determining the supply of milk. Despite the rise in the \$NZ over the last 5–10 years to levels as high as \$US0.84, a factor that would normally reduce returns, the increase in price received to more than \$8.00 / kg milk solids in 2014 negated the downside of the exchange rate, encouraging more dairy farm conversions / increases in dairy cow numbers and higher production volumes. But due to falling international prices in 2015, the decreased scheduled milk payout of \$3.80 (or even lower) will hurt farmers.

Quantity available

- Because of recent droughts, farmers had sold ewes, due to a feed shortage. Without ewes to breed with, farmers are unable to produce lambs for sale. Farmers may also hold some lambs back in order to build up their stocks for following years. It can be expected that lambs going to the works will reduce in number, because there is not the normal quantity available.
- In 2013–2014, Kiwifruit orchards were destroyed in an effort to control the PSA outbreak. With the reduction of vines, the quantity of Kiwifruit available has been reduced. The replanted vines are just coming back into production, so the quantity available for sale is beginning to increase again.

Weather events

- Drought in Canterbury increased cattle slaughter as farmers moved stock off their properties.
- Drought in Canterbury ideal for grape-growing.
- Late frosts for fruit.
- Drought in the North Island over the last two years is expected to reduce lamb numbers at the works, as farmers hold on to stock to re-grow numbers.

N1	N2	А3	A4	М5	М6	E7	E8
ONE market force partially explained, with reference to a specified product.	TWO market forces partially explained, with reference to a specified product.	ONE market force explained in general terms, with reference to the price trends for a specified product.	TWO market forces explained in general terms, with reference to the price trends for a specified product.	ONE market force explained in detail, and the other supported, with reference to the price trends for a specified product, using quantitative material where appropriate.	TWO market forces explained in detail, with reference to the price trends for a specified product, using qualitative and /or quantitative material where appropriate.	TWO market forces explained in detail, with reference to the price trends for a specified product, using qualitative and /or quantitative material where appropriate. AND Partial justification of the ranking, using both qualitative and quantitative material where appropriate.	TWO market forces explained in detail, with reference to the price trends for a specified product, using qualitative and /or quantitative material where appropriate. AND A full and comprehensive justification of the ranking, using both qualitative and quantitative material where appropriate.

N0 = No response; no relevant evidence.

Question Two: Market forces affecting the demand for primary products

Sample evidence

Consumer preferences

- The Asian palate prefers sweeter and smaller fruit; kiwifruit GOLD meets this preference, and so demand is increasing.
- UK lamb market. Because butchers make cuts based on weather (steaks and chops on BBQ days, roasts on colder days), New Zealand exports "tribal" cuts (lamb leg /forequarter) so that those decisions can be made over there.
- Potatoes for processing need to be large (>75 mm), oval-shaped, and with low sugar content. This allows large French fries to be made, which is a preference of the final consumer. Potatoes meeting these requirements get \$300/tonne. Potatoes more suited for the table/fresh potato market are smaller and more rounded, and fetch \$500/tonne. Absence of potato tomato psyllid (PTP) is another quality requirement of processors, as it infects potatoes with liberibacter, which causes "zebra chip". Potatoes infected with this cannot be processed, and so are dumped on the fresh market (zebra chip becomes evident with deep frying, not normal cooking), lowering the price of fresh potatoes to around \$300/tonne.

Promotion

• "Named promotion strategy" targeted at xxxx audience through xxxx media. In response to xxxx, research has increased demand of the product by xx%.

Quality requirements of processors / buyers

This implies that answers will be in terms of "What the factory will buy from growers". For example:

• Through market research in the UK, the ideal lamb roast is 2 kg (to feed the nuclear family of 2 adults and 2.4 children). To produce this size roast, a lamb liveweight of 40–45 kg (CW 17.5–19.5 kg) is required. Therefore, lambs with a liveweight of 45 kg and GR of 9–13 mm at the shoulder fetch premium prices.

Reliability of supply

Zespri New Zealand performs two main functions that provide advantages to New Zealand Kiwifruit growers. Firstly, because they are a single point seller to export markets, they can reliably supply large markets with significant volumes to make the contract appeal to supermarket chains, etc. Secondly, in order to have a continual shelf presence throughout the year, Zespri have contracted Northern Hemisphere growers to provide fruit under the Zespri brand. By providing buyers with a reliable supply of produce, they are able to secure better contracts.

N1	N2	А3	A4	M5	М6	E7	E8
ONE market force partially explained, with reference to a specified product.	TWO market forces partially explained, with reference to a specified product.	ONE market force explained in general terms, with reference to a specified product.	TWO market forces explained in general terms, with reference to a specified product.	ONE market force explained in detail, and the other supported, using qualitative and / or quantitative material where appropriate.	TWO market forces explained in detail, using qualitative and / or quantitative material where appropriate.	TWO market forces explained in detail, using qualitative and / or quantitative material where appropriate. AND Partial justification, using BOTH qualitative and quantitative material where appropriate.	TWO market forces explained in detail, using qualitative and / or quantitative material where appropriate. AND A full and comprehensive justification, using BOTH qualitative and quantitative material where appropriate.

Question Three: The TPP and its effect on another primary product for export

Sample evidence

New Zealand has been trying to sell its agricultural products into the USA for many years, but because tariffs and quotas are protective of US-produced products, we are unable to be competitive in the US market. The TPP offers the first opportunity we have had to successfully negotiate a free trade agreement with the USA.

New Zealand is not the world's largest producer of (lamb, dairy, kiwifruit, etc), however we are one of the largest exporters of (lamb, dairy, kiwifruit, etc).

We rely too heavily on the UK and China markets. Should one of these reduce or end their demand for New Zealand products (e.g. due to increased dairy production in China), it will create an issue for selling at profitable prices to other markets.

There will still be a need to overcome sanitory / phytosanitory requirements to access these other markets.

As tariffs for overseas markets are removed through the TPP Agreement, our prices in those markets should drop, therefore making New Zealand products more price-competitive.

New Zealand export products are generally of high quality, with frequent use of the "New Zealand green and pure" brand. This helps them to become consumer-preferred products, with consequent increases in quantity demanded and produced. The increase in production is needed to maintain market presence.

Threats of Clinton and Trump administrations both voicing a veto of TPPA. Without USA signing, the whole agreement is under threat.

N1	N2	А3	A4	M5	М6	E7	E8
The market impacts from TPP are described, using the resource provided.	The market impacts from TPP are described in general terms.	Two obvious comparisons between TPP and market impacts for their own nominated product are made.	Two obvious comparisons between TPP and market impacts for their own nominated product are made. Some attempt to include data from sources beyond the resource supplied.	Two obvious comparisons between TPP and market impacts for their own nominated product are made, using supporting data outside the resource supplied.	Two obvious comparisons between TPP and market impacts for their own nominated product are made, using supporting data outside the resource supplied, with either supply <i>OR</i> demand discussed in depth.	Two obvious comparisons between TPP and market impacts for their own nominated product are made, using supporting data outside the resource supplied, with either supply <i>OR</i> demand discussed comprehensively, and the other mentioned.	Two obvious comparisons between TPP and market impacts for their own nominated product are made, using supporting data outside the resource supplied, with BOTH supply and demand discussed comprehensively.

N0 = No response; no relevant evidence.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence	
0 – 6	7 – 12	13 – 18	19 – 24	