

# 3

91530



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## Level 3 Agricultural and Horticultural Science, 2015

### 91530 Demonstrate understanding of how market forces affect supply of and demand for New Zealand primary products

9.30 a.m. Monday 30 November 2015  
Credits: Five

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of how market forces affect supply of and demand for New Zealand primary products.	Demonstrate in-depth understanding of how market forces affect supply of and demand for New Zealand primary products.	Demonstrate comprehensive understanding of how market forces affect supply of and demand for New Zealand primary products.

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

**You should attempt ALL the questions in this booklet.**

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–16 in the correct order and that none of these pages is blank.

**YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.**

**Not Achieved**

**TOTAL**

**7**

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## INSTRUCTIONS

This assessment relates to New Zealand primary products that either earn significant export revenue or allow for self-sufficiency within New Zealand.

Before selecting a product for each question, carefully note the following points:

1. Read each question to ensure that you can meet all of its requirements.
2. Different products must be selected for Question One and Question Two.
3. Any product (other than KiwiBerries) may be selected for Question Three, including products used in Questions One or Two.

Choice of market forces affecting product **supply** for discussion in Question One:

- exchange rate
- price trends
- political intervention
- weather events.

Choice of market forces affecting product **demand** for discussion in Question Two:

- consumer preferences
- promotion
- quality requirements of processors or buyers
- price.

Question Three requires you to discuss and compare the **challenges and opportunities** associated with the supply of KiwiBerries to export markets with those of another New Zealand primary product. This may be a product you have already used, or a different product. It must be **exported** at a nationally significant level.

SELECTION OF PRIMARY PRODUCTS	
Primary product (1) for discussion of supply:	<sup>Fresh</sup> MILK <del>powder</del>
Primary product (2) for discussion of demand:	meat and edible oil
Primary product for comparison with KiwiBerries:	milk powder

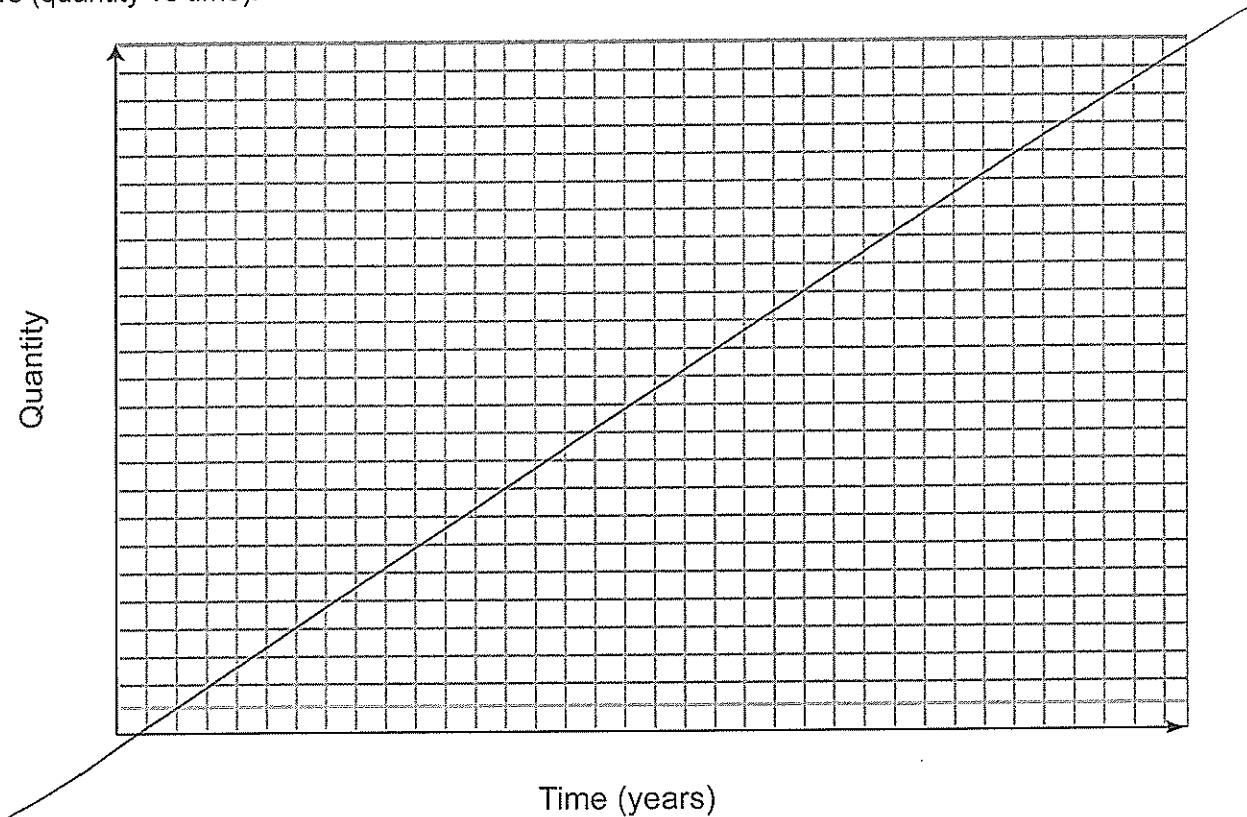
**Note:** In your answers, use specific examples, including recent units and values where appropriate, to help explain how market forces affect supply and demand – e.g. volume of product, typical costs, and returns to producers.

**QUESTION ONE: Market forces affecting the supply of primary products**

Note that neither KiwiBerries nor the product you have chosen for discussion in Question Two can be used for this question.

Primary product (1): fresh milk ~~potatoes~~

Draw a graph on the grid below, representing trends in the quantity exported over the last five years (quantity vs time).



Explain the impact of different market forces affecting **supply**, shown in the box below, that account for the trends observed.

Exchange rate	<u>Price trends</u>
Political intervention	Weather events

In your answer:

- identify the trends that are observed in the graph
- for TWO of the market forces shown in the box above, explain how each contributes to the market trends observed in the graph
- rank the importance of these two market forces in terms of their impact on the market trends observed, and justify your ranking
- use data and evidence where appropriate.

fresh milk comes from dairy farms. over the last 5 years dairy farms have been supplying

more and more as the price they were being payed increased. In that time though supply dropped a few ~~th~~ times when the price farmers were being payed dropped. This was because, for the farmers they were better off buying in extra calves, growing them then selling them off at 6 months. The most significant drop in prices was in the last few months.

The weather also affects the amount of milk can supply because when it is hot and dry as it has been the last couple of summers, the cows don't make as much milk so the farmers can not supply as much. At times like this ~~then~~ prices usually increase a little bit.

Also if it rains to much and floods for long periods of time this will kill grass so cows can not produce as much. Also if to many extra cold frosts hit in a row this will also kill the grass and supply will decrease.

More space for this answer is available on the next page.

A3

## QUESTION TWO: Market forces affecting the demand for primary products

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Note that neither KiwiBerries nor the product you have chosen for discussion in Question One can be used for this question.

Primary product (2): meat and edible offal

Demand for a product can often be influenced by more than one factor. For your second selected product, identify market forces from the box below that impact on **demand**, and explain the relative importance of each of these forces.

Consumer preferences  
Promotion  
Quality requirements by processors or buyers  
Price

In your answer:

- select TWO of the market forces from the box above, and explain the relative importance of each to the demand for the product
- select the market force that has the greater effect on the demand for your primary product, and justify your selection using data and evidence as appropriate.

from 2007 to 2012 demand for meat and edible offal has increased. it is now new zealand's second biggest export after cheese, and milk powder. in 2012 meat and edible offal made up 11% of all exports from new zealand. this was due to consumer preferences. people in other countries wanted what we have so the countries had to buy more in.

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### QUESTION THREE: Supply of KiwiBerries and another primary product for export

#### RESOURCE ON KIWIBERRIES

##### Product description



The KiwiBerry belongs to the kiwifruit family, and is grown in a similar way. It is a smooth, small, hairless berry (5–20 g) with an edible skin, and its shape varies from round to elongated. Kiwiberries are eaten whole, including the skin, and are sweet, with a gooseberry / guava flavour. They are very high in vitamin C and antioxidants, and can be used in drinks, salads, salsas, muffins, kebabs, and as snacks.

Harvest is from February to April.

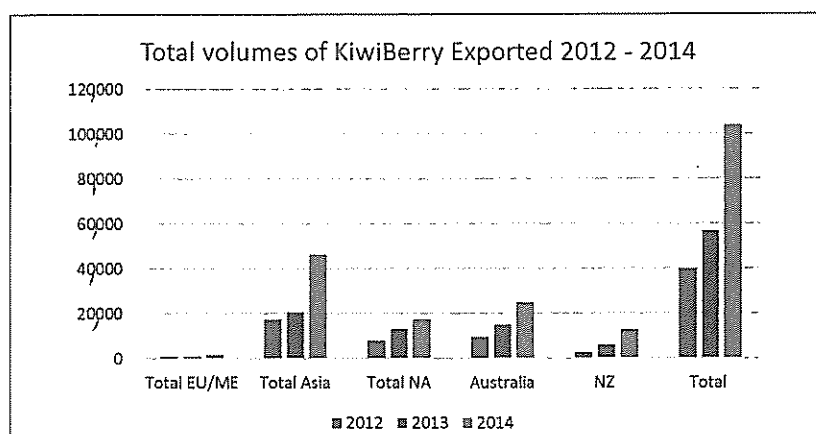
KiwiBerries have not been threatened by the PSA disease.

##### Overseas markets

The exported fruit is air-freighted to Asia – China, Singapore, Hong Kong, and Taiwan – and to Australia, the US, and Europe. It is mostly sold in retail outlets; there may be opportunities to sell more KiwiBerries into food service industries.

##### Market trends

Current export trends are illustrated by the graph below. Quantities shown on the vertical axis are the number of trays delivered.



##### Marketing challenges

- Many growers have said that the seven-figure license-to-grow fee charged by HortResearch (now Plant & Food Research) priced them out of the market.
- Growers complain that HortResearch are promoting their varieties in Australia and Chile. Both harvest at the same time as New Zealand and compete with New Zealand growers.
- The total New Zealand crop comes from about 30 hectares of vines on pergolas, and plant material is carefully controlled to avoid over-production.
- The very short season does not allow for long-term market establishment.

Text source (adapted): <http://www.nzkiwiberry.com>

Image source: <http://impeckableeats.com/2012/03/strawberry-kiwiberry-mascarpone-cream-parfait/>

Graph source: NZKiwiBerries Growers Inc



New Zealand's isolation and location in the Southern Hemisphere provide us with both challenges and opportunities when exporting our products to overseas markets.

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Using the resource on page 12, compare and contrast KiwiBerries with a product you have studied, in terms of the challenges and opportunities that exist for supplying New Zealand's primary products to export markets.

Kiwi Berries are only harvested for 3 months of the year and probably do not have a very long shelf life so they can only be sold/exported for a few months every year where as milk powder can be sold and exported all year round because some farms produce milk all year round so fresh milk powder can be made all year round. It will also have a much longer shelf life so older milk powder can be sold/exported even when demand is high and supply isn't as high as demand.

Being isolated and in the southern hemisphere slightly restricts us from exporting all around the world and to the northern hemisphere but being so close to Australia provides us with huge opportunities because even though there demand isn't as high for all exported products, they still

More space for this answer is available on the next page.

they buy a lot from us because of the ease of shipping.

So New Zealand exported milk powder is a much more stable industry because of the extended selling time and also because of the fact that there is much more milk powder. and because we have more of it we can sell a higher quantity of it. //

A series of horizontal lines for writing, with a diagonal line drawn across them from the top left towards the bottom right.

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Not Achieved exemplar for 91530 – 2015		Total score: 7
Q	Grade score	Annotation
1	A3	This response generalised about when the price dropped, farmers supplied less milk and instead focused on growing extra calves, whereas in times of higher prices, the volume of milk was higher. Milk volumes or prices were not provided.
2	N2	The response noted an increase in demand for edible offal, but no specific consumer preference was specified for the increase. There needed to be a specific consumer preference specified.
3	N2	The response was borderline N2/A3. There were some correct facts, such as milk powder having a longer shelf life than Kiwiberries, but also some incorrect statements, such as our distance restricting our exports to the northern hemisphere.