

See back cover for an English  
translation of this cover

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91297M



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD  
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

SUPERVISOR'S USE ONLY

Tohua tēnei pouaka mēnā  
KĀORE koe i tuhihi i  
roto i tēnei pukapuka

## Te Mātai i te Ahuwhenua me te Ahumāra, Kaupae 2, 2021

**91297M Te whakaatu māramatanga ki te whakamahinga o  
te whenua mō te huanga mātāmua i Aotearoa**

Ngā whiwhinga: E whā

Paetae	Kaiaka	Kairangi
Te whakaatu māramatanga ki te ahunga o te whenua mō te huanga mātāmua i Aotearoa.	Te hōhonu o te whakaatu māramatanga ki te ahunga o te whenua mō te huanga mātāmua i Aotearoa.	Te tōtōpū o te whakaatu māramatanga ki te ahunga o te whenua mō te huanga mātāmua i Aotearoa.

Tirohia kia kitea ai mēnā e rite ana te Tau Ākonga ā-Motu (NSN) kei runga i tō puka whakauru ki te tau kei runga i tēnei whārangi.

**Me whakamātau koe i ngā tūmahi KATOA kei roto i tēnei pukapuka.**

Mēnā ka hiahia whārangi atu anō mō ō tuhinga, whakamahia ngā whārangi wātea kei muri o tēnei pukapuka.

Tirohia kia kitea ai e tika ana te raupapatanga o ngā whārangi 2–23 kei roto i tēnei pukapuka, ka mutu, kāore tētahi o aua whārangi i te takoto kau.

Kaua e tuhi i ngā wāhanga e kitea ai te kauruku whakahāngai (☒). Ka tapahia pea taua wāhanga i te wā e mākahia ana te pukapuka.

**HOATU TE PUKAPUKA NEI KI TE KAIWHAKAHAERE HEI TE MUTUNGA O TE WHAKAMĀTAUTAU.**

## TE TŪMAHI TUATAHI: Te mauti me te ngahere

E whakaohiti ana ngā kaimahi pāmu i te Kāwanatanga ki tā āna whakahoutanga i te Kaupapa Tauhokohoko ā-Tukunga whakatere ake i te huringa o te mauti whaihua hei ngahere.



- (a) Homai ngā ingoa o ngā rohe e RUA, ka whakamārama mai ai i te āhua o tā ngā āhuatanga o te taiao whakatau kia ahungia tētahi hei mauti mai rā anō, kia ahungia hoki tērā atu hei ngahere.

Te rohe 1 – Te mauti:

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Te rohe 2 – Te ngahere:

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**QUESTION ONE: Pasture and forestry**

Farmers are warning the Government that its proposed reforms to the Emission Trading Scheme could accelerate conversion of productive pasture into forestry.



- (a) Name TWO regions, and explain how environmental factors have led to one being traditionally used for pasture and the other for forestry.

Region 1 – Pasture: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Region 2 – Forestry: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- (b) Matapakitia te/ngā take e whakatau ai te kaimahi pāmu ki te ahu tonu i te whenua whaihua hei mauti, kia hurihia rānei hei ngahere. I tō whakautu, whakaarohipa ngā āhuatanga ā-ōhangā, ā-ohu mahi hoki.



- (b) Discuss why a farmer would decide to retain productive land in pasture, or convert to forestry. In your answer, consider economic and workforce factors.



## TE TŪMAHI TUARUA: Ngā aukati i te huringa o te ahunga whenua

Arā ngā aukati i te huringa o te ahunga whenua, arā, i te korenga e tino ahu ana i te whenua mai rā anō ki te kaha ake o te ahunga whenua.



- (a) Homai te ingoa o tētahi rohe kāore nei e tino ahungia ana tōna whenua mai rā anō, ā, whakamāramahia hoki te āhua i tū ai ngā āhuatanga e RUA hei aukati i te huringa kia kaha ake te ahungia o te whenua.

Te rohe: \_\_\_\_\_

Te ahunga whenua mai rā anō: \_\_\_\_\_

Te āhuatanga 1: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Te āhuatanga 2: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**QUESTION TWO: Barriers to changing land use**

There are a number of barriers to changing land use from traditional low-intensity land use to more intensive land use.

- (a) Name a region traditionally used for low-intensity land use, and explain how TWO factors have acted as barriers to a more intensive land use.

Region: \_\_\_\_\_

Traditional land use: \_\_\_\_\_

Factor 1: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Factor 2: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- (b) He aha pea te/ngā take e huri ai te kaimahi pāmu i te korenga e tino ahu ana i te whenua mai rā anō kia kaha ake te ahunga whenua? Whakamāramahia te āhua o tā te kaimahi pāmu whakawātea i ngā aukati ki te whakakahatanga.

Parahautia ō tuhinga mā te matapaki i ngā āhuatanga e RUA mai i ēnei e whai ake nei:

- ā-ōhangā
  - ā-taiao
  - ā-hangarau.

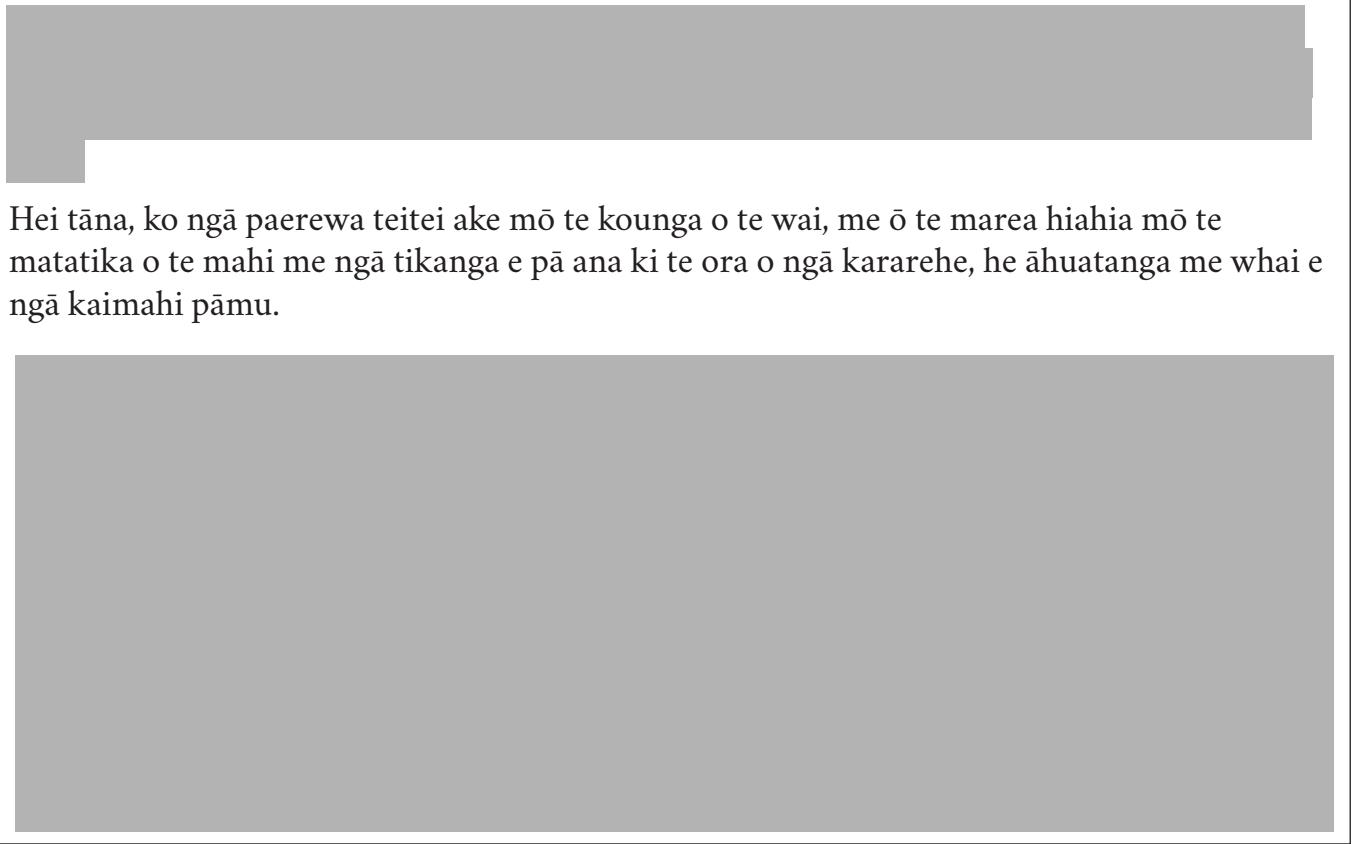


- (b) Why would a farmer change from a traditional low-intensity land use to a more intensive land use? Explain how the farmer could overcome barriers to intensification.

Justify your answer by discussing TWO of the following factors:

- economic
  - environmental
  - technological.



**TE TŪMAHI TUATORU: Te raihana ā-here tangoro ki te mahi pāmu**

Hei tāna, ko ngā paerewa teitei ake mō te kounga o te wai, me ō te marea hiahia mō te matatika o te mahi me ngā tikanga e pā ana ki te ora o ngā kararehe, he āhuatanga me whai e ngā kaimahi pāmu.

- (a) Homai kia RUA ngā ahunga whenua rerekē mō te huanga mātāmua, ka whakamārama ai i te āhua i whakaraerae ai te raihana ā-here tangoro ki te mahi pāmu.

Te ahunga whenua 1:

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Te ahunga whenua 2:

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**QUESTION THREE: Social licence to farm**

The higher standards around water quality, and the public expectations around ethical labour and animal welfare practices are realities farmers have to accept, he said.

- (a) Name TWO different primary-production land uses, and explain how a farmer's social licence to farm has been threatened.

Land use 1: \_\_\_\_\_

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Land use 2: \_\_\_\_\_

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- (b) Parahautia tētahi ahunga whenua mō te huanga mātāmua, otirā, e pā ana ki tō te kaimahi pāmu raihana ā-here tangoro ki te mahi pāmu.

I tō tuhinga, whakaarotia ngā āhuatanga e RUA o ēnei e whai ake nei:

- ā-hangarau
  - ā-pāpori
  - ā-tōrangapū.

## Te ahunga whenua mō te huanga mātāmua:



- (b) Justify a specific primary-production land use in terms of a farmer's social licence to farm.

In your answer by considering TWO of the following factors:

- technological
  - social
  - political.

## Specific primary-production land use:



**He whārangi anō ki te hiahiatia.  
Tuhia te tau tūmahi mēnā e hāngai ana.**

TE TAU  
TŪMAHI

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Write the question number(s) if applicable.**

QUESTION  
NUMBER

**He whārangi anō ki te hiahiatia.  
Tuhia te tau tūmahi mēnā e hāngai ana.**

TE TAU  
TŪMAHI

## Ngā mihi

He mea whakahāngai ngā kai i ngā mātāpuna e whai ake nei hei whakamahinga i tēnei whakamātautau.

## Te whārangi 2

Te whakaahua: [https://www.newshub.co.nz/home/rural/2020/07/forestry-sector-stresses-right-tree-right-place-approach-as-debate-over-carbon-farming-continues/\\_jcr\\_content/par/video/image.dynimg.1280.q75.jpg/v1595911205996/getty-forestry-trees-1120.jpg](https://www.newshub.co.nz/home/rural/2020/07/forestry-sector-stresses-right-tree-right-place-approach-as-debate-over-carbon-farming-continues/_jcr_content/par/video/image.dynimg.1280.q75.jpg/v1595911205996/getty-forestry-trees-1120.jpg)

## Te whārangi 8

Te whakaahua: <https://i.pinimg.com/originals/d0/ce/90/d0ce90376a74f062cc2387d4f5ff6558.jpg>

**Te whārangi 14**

Te whakaahua: <https://devpolicy.org/wp-content/uploads/2018/10/RSE-workers-Credit-Rochelle-Bailey.jpg>

Te whakaahua: <https://www.stuff.co.nz/business/farming/opinion/112667884/facts-overruled-in-farmings-fight-for-social-licence>

Ngā kupu: <https://www.stuff.co.nz/business/farming/108950407/higher-standards-for-farming-here-to-stay-if-industry-is-to-retain-social-licence>

QUESTION  
NUMBER

**Extra space if required.  
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**Acknowledgements**

Material from the following sources has been adapted for use in this examination:

**Page 3**

Image: [https://www.newshub.co.nz/home/rural/2020/07/forestry-sector-stresses-right-tree-right-place-approach-as-debate-over-carbon-farming-continues/\\_jcr\\_content/par/video/image.dynimg.1280.q75.jpg/v1595911205996/getty-forestry-trees-1120.jpg](https://www.newshub.co.nz/home/rural/2020/07/forestry-sector-stresses-right-tree-right-place-approach-as-debate-over-carbon-farming-continues/_jcr_content/par/video/image.dynimg.1280.q75.jpg/v1595911205996/getty-forestry-trees-1120.jpg)

**Page 9**

Image: <https://i.pinimg.com/originals/d0/ce/90/d0ce90376a74f062cc2387d4f5ff6558.jpg>

**Page 15**

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*English translation of the wording on the front cover*

## **Level 2 Agricultural and Horticultural Science 2021**

### **91297M Demonstrate understanding of land use for primary production in New Zealand**

Credits: Four

**91297M**

<b>Achievement</b>	<b>Achievement with Merit</b>	<b>Achievement with Excellence</b>
Demonstrate understanding of land use for primary production in New Zealand.	Demonstrate in-depth understanding of land use for primary production in New Zealand.	Demonstrate comprehensive understanding of land use for primary production in New Zealand.

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 2–23 in the correct order and that none of these pages is blank.

Do not write in any cross-hatched area (☒). This area may be cut off when the booklet is marked.

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