

**Victorian Certificate of Education  
2021**

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER           Letter

**GEOGRAPHY**  
**Written examination**

**Friday 12 November 2021**

**Reading time: 3.00 pm to 3.15 pm (15 minutes)**

**Writing time: 3.15 pm to 5.15 pm (2 hours)**

**QUESTION AND ANSWER BOOK**

**Structure of book**

<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
8	8	80

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners, rulers, coloured pencils, water-based pens and markers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or correction fluid/tape.
- No calculator is allowed in this examination.

**Materials supplied**

- Question and answer book of 12 pages
- Data book
- Additional space is available at the end of the book if you need extra space to complete an answer.

**Instructions**

- Write your **student number** in the space provided above on this page.
- All written responses must be in English.

**At the end of the examination**

- You may keep the data book.

**Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.**

**Instructions**

Answer **all** questions in the spaces provided. Refer to the data book as indicated.

**Question 1** (12 marks)

- a. In the space below, draw a sketch map of your selected area of fieldwork. Include a legend to show at least **two** significant geographical characteristics before land use change occurred or is likely to occur.

4 marks

**DO NOT WRITE IN THIS AREA**

- b. Annotate the sketch map in **part a.** to identify the location of land use change that occurred or is likely to occur at your selected area of fieldwork. 2 marks
  
- c. Describe **either** one impact on the environment **or** one impact on the social conditions that resulted or could result from the land use change identified in **part b.** 6 marks

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**DO NOT WRITE IN THIS AREA**

*Use Figure 1 on pages 2 and 3 of the data book when responding to Question 2.*

**Question 2** (8 marks)

**a.** Define the process of desertification.

2 marks

---

---

---

---

**b.** ‘There is a strong spatial association between the areas of degraded lands in 1990 and the areas desertified in 2018.’

Evaluate this statement.

6 marks

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**DO NOT WRITE IN THIS AREA**

**Question 3** (10 marks)

Using an appropriate criterion, evaluate the effectiveness or likely effectiveness of a global response to the impacts of deforestation.

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**DO NOT WRITE IN THIS AREA**

**TURN OVER**

**Question 4** (10 marks)

- a.** With reference to a selected location, explain the significance of melting glaciers and ice sheets for economic activity.

5 marks

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

- b.** With reference to a selected location, explain the significance of melting glaciers and ice sheets for the environment. This may be the same location as in **part a.** or it may be a different location.

5 marks

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

DO NOT WRITE IN THIS AREA

**Question 5** (10 marks)

A demographic dividend is a boost in economic productivity that occurs when there are growing numbers of people in the workforce relative to the number of dependants.

Discuss the view that the demographic dividend experienced by some populations can be closely related to different stages of the Demographic Transition Model. In your response, refer to specific examples.

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

DO NOT WRITE IN THIS AREA

Use Figure 2 on pages 4 and 5 of the data book when responding to Question 6.

**Question 6** (14 marks)

- a.** Describe Bangladesh's positions relative to the world averages for 1990 and 2020. 4 marks

---

---

---

---

---

---

---

---

---

---

- b.** Compare Bangladesh's positions described in **part a.** to Afghanistan's positions. 4 marks

---

---

---

---

---

---

---

---

---

---

DO NOT WRITE IN THIS AREA



- c. Explain how the trend in under-five-years mortality shown in Figure 2 could have an impact on the total fertility rate.

6 marks

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

DO NOT WRITE IN THIS AREA

TURN OVER

*Use Figure 3 on page 6 of the data book when responding to Question 7.*

**Question 7** (8 marks)

Discuss the extent to which the data in Figure 3 supports Malthusian theory about population and sustainability.

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**DO NOT WRITE IN THIS AREA**

**Question 8** (8 marks)

**a.** Outline **one** issue of an ageing population in a selected country. 2 marks

---



---



---



---

**b.** Describe **either** two economic factors **or** two social factors that contribute to the issue outlined in **part a.** 6 marks

---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---

DO NOT WRITE IN THIS AREA



**Victorian Certificate of Education  
2021**

**GEOGRAPHY**  
**Written examination**

**Friday 12 November 2021**

**Reading time: 3.00 pm to 3.15 pm (15 minutes)**

**Writing time: 3.15 pm to 5.15 pm (2 hours)**

**DATA BOOK**

**Instructions**

A question and answer book is provided with this data book.

Refer to the data in this book for each question as indicated in the question and answer book.

The data contained in this book is drawn from current real-world case studies.

**Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.**

# Figure 1 | Land cover change

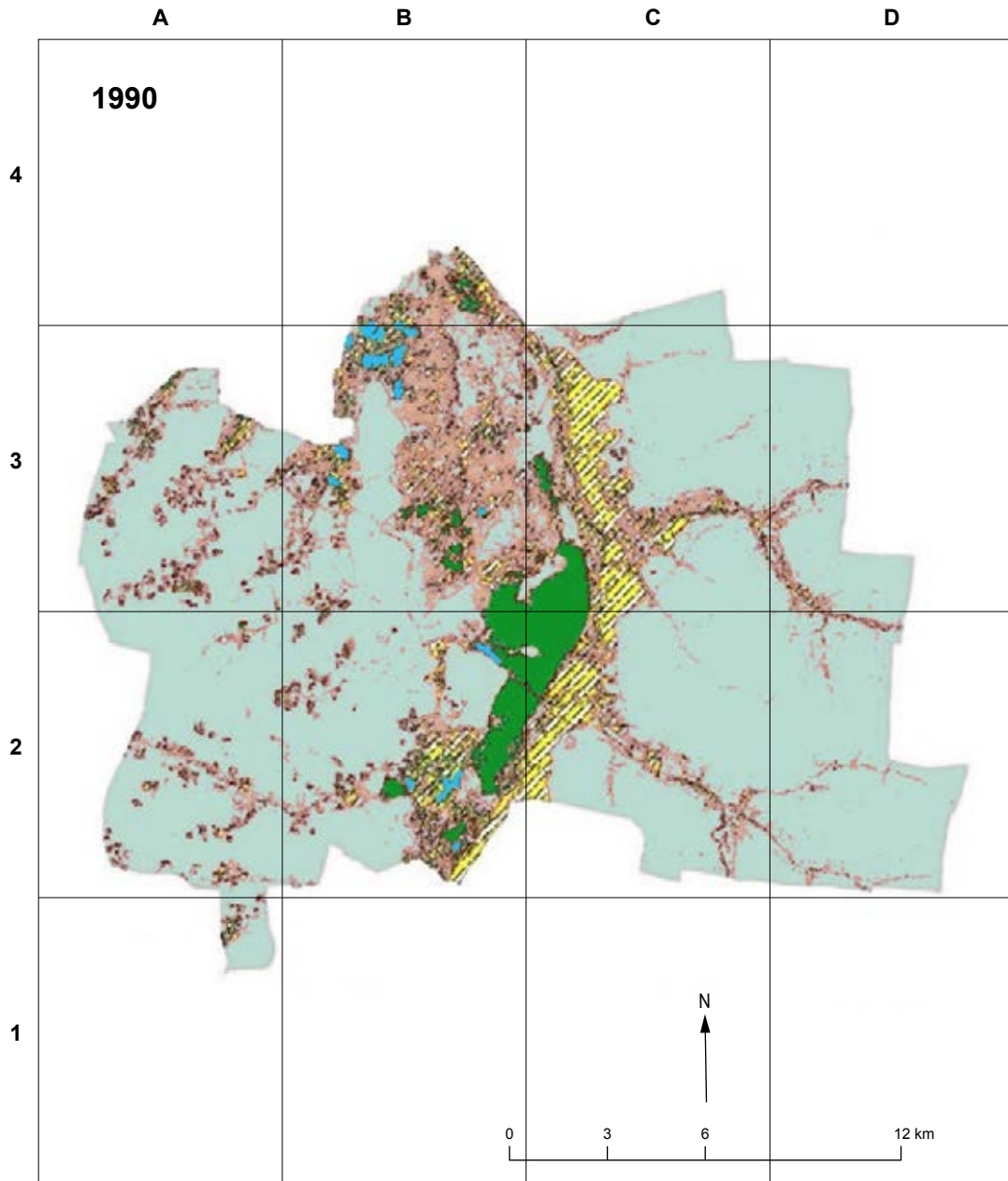


Figure 1a: Land cover Anantapur district, southern India, 1990

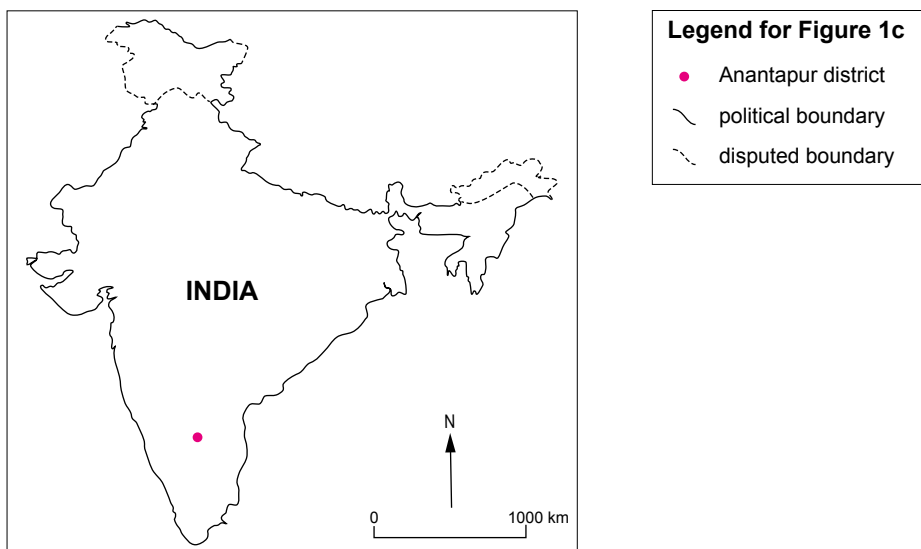
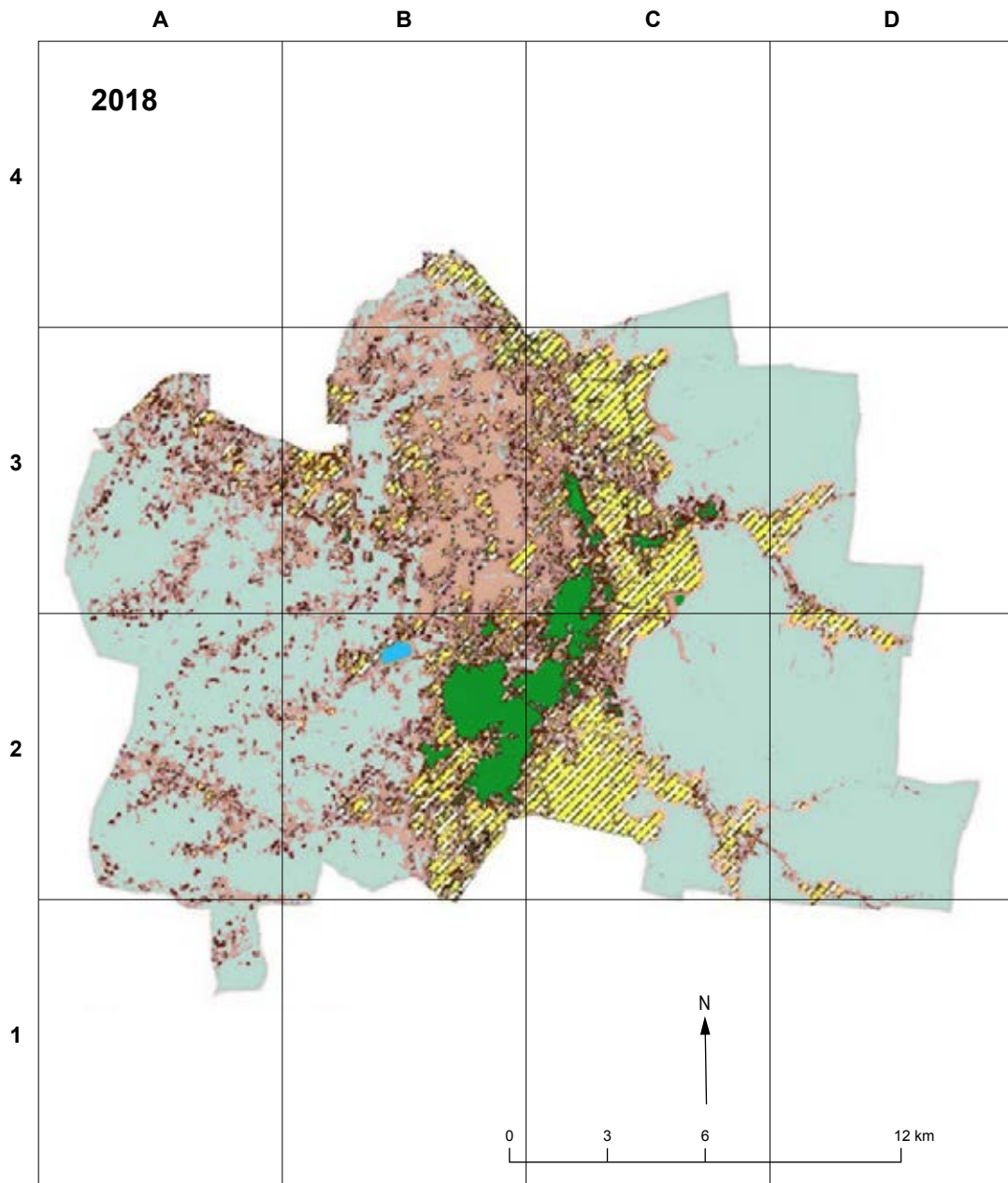
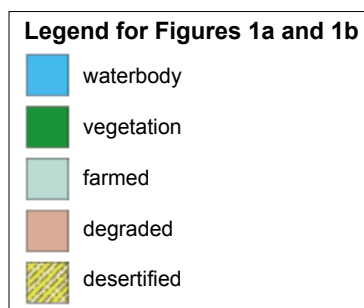


Figure 1c: Location map of Anantapur district



**Figure 1b: Land cover Anantapur district, southern India, 2018**



Source (Figures 1a, 1b and 1c): adapted from B Pradeep Kumar et al., 'Identification of land degradation hotspots in semiarid region of Anantapur district, Southern India, using geospatial modeling approaches', *Modeling Earth Systems and Environment*, vol. 6, issue 3, 6 May 2020, p. 1850

# Figure 2 | Human population

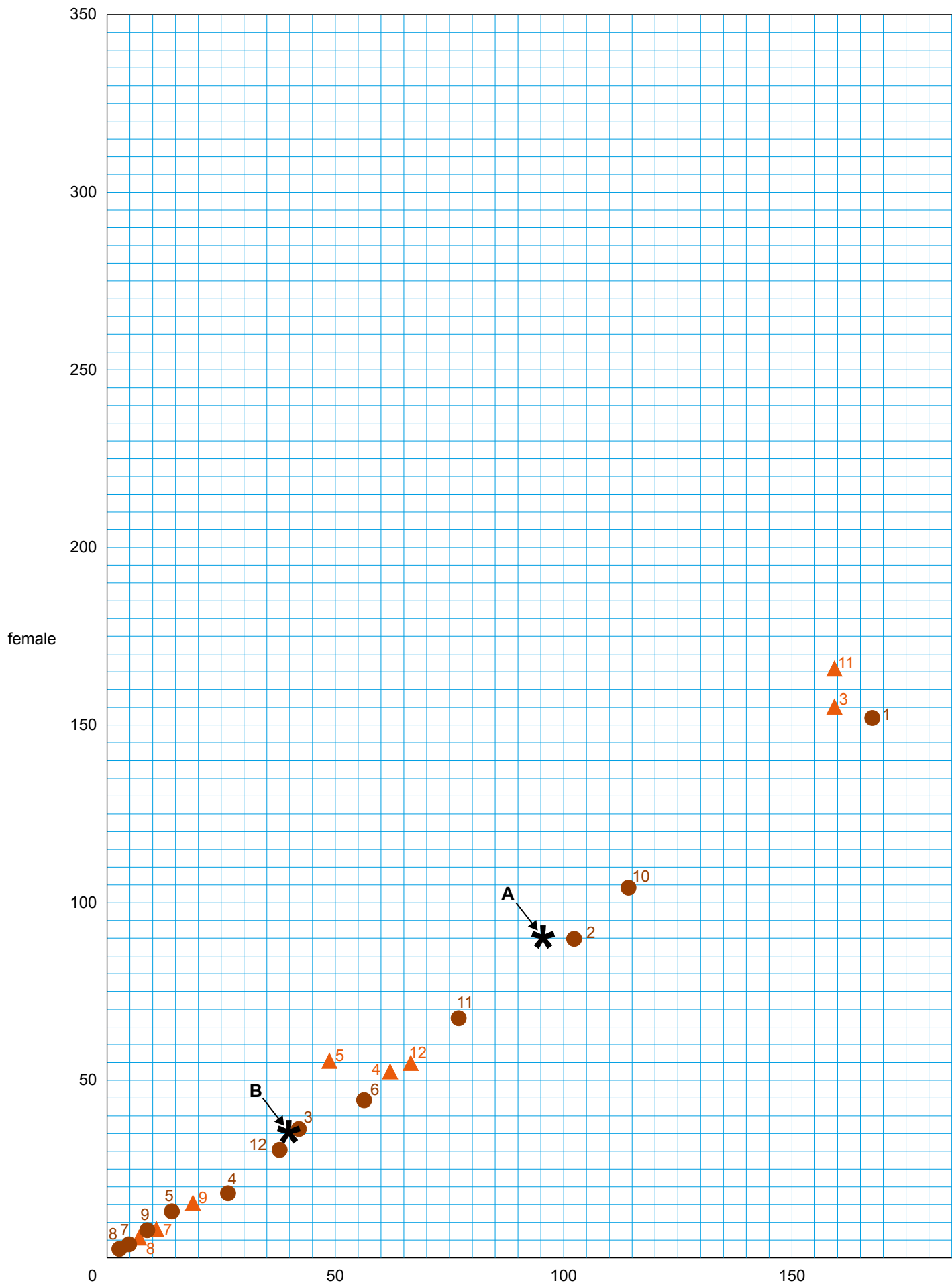
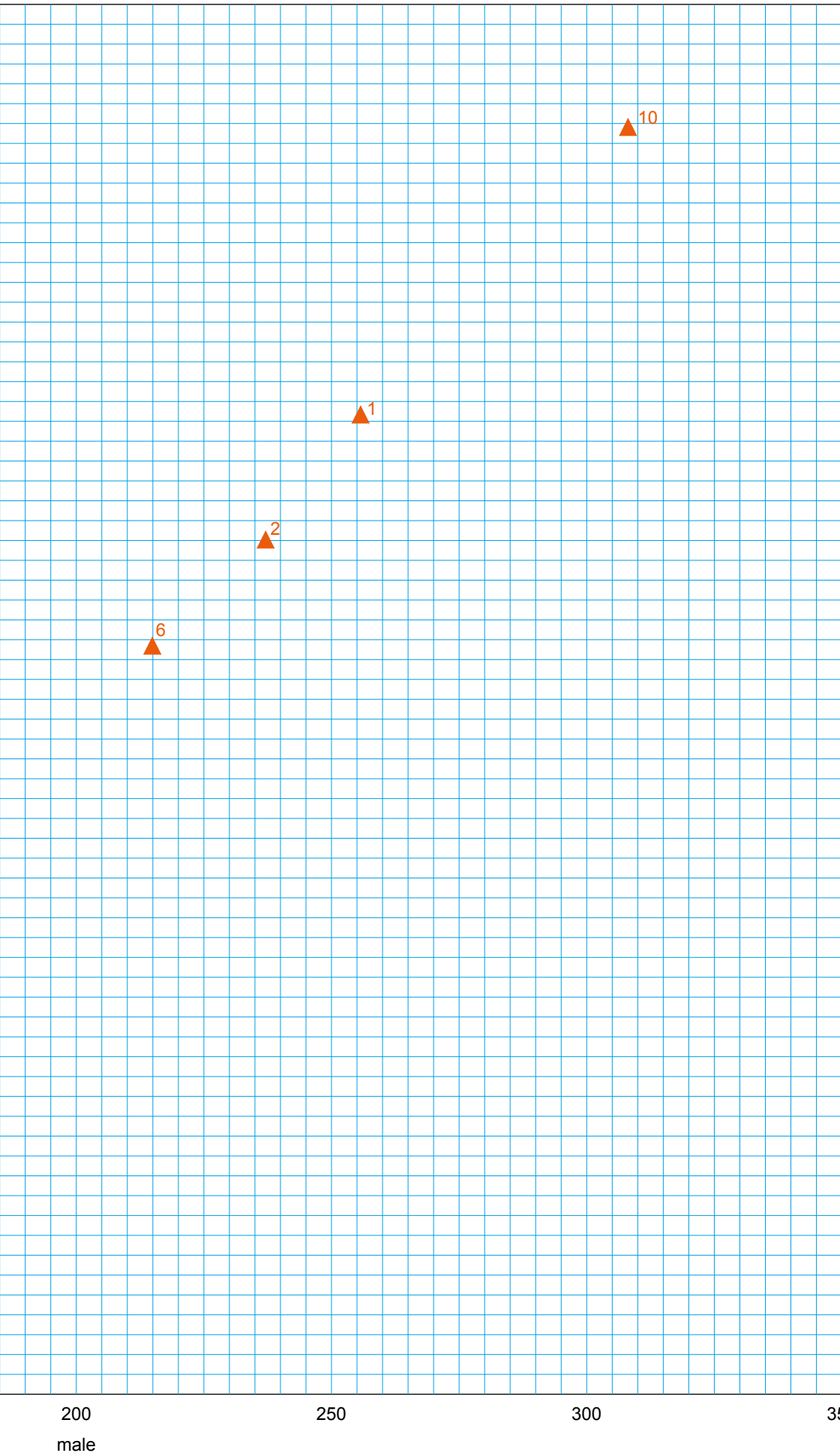


Figure 2: Under-five-years mortality rate per 1000 male births and per 1000 female births, 1990 and 2020





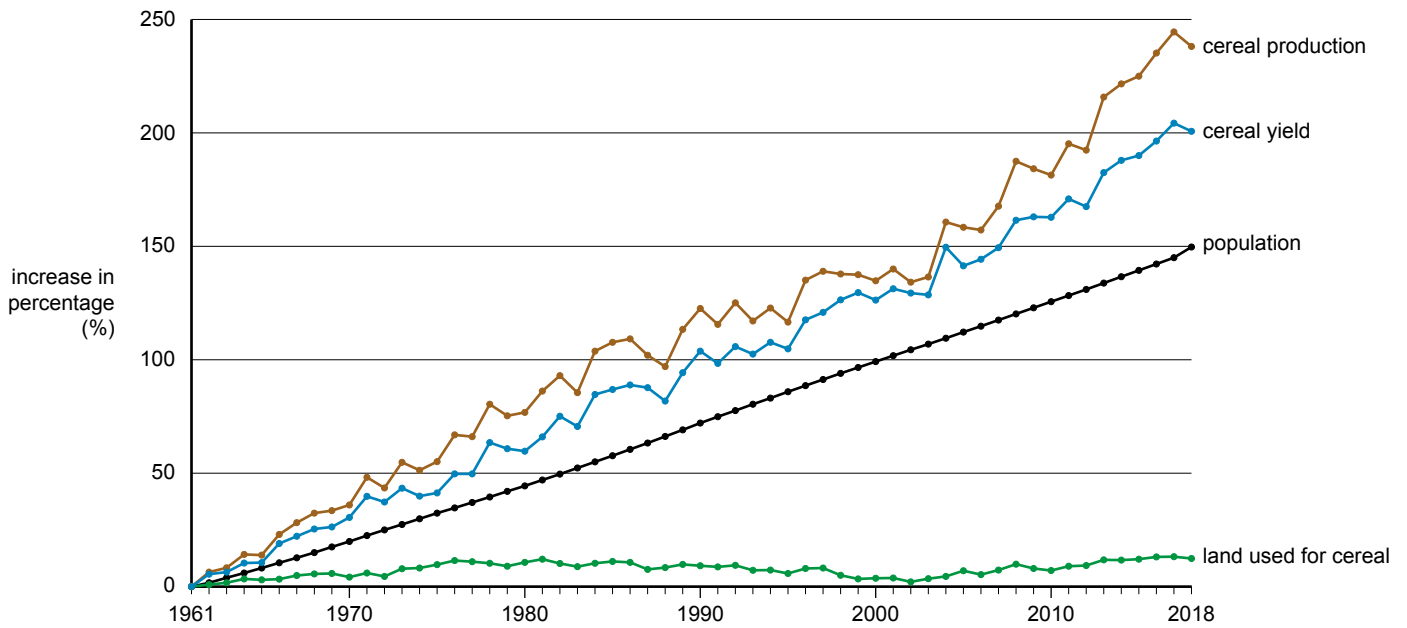
**Legend**

- ▲ 1990
- 2020
- \*A world average 1990
- \*B world average 2020

1. Afghanistan
2. Angola
3. Bangladesh
4. Brazil
5. China
6. Ethiopia
7. France
8. Japan
9. Malaysia
10. Niger
11. Pakistan
12. South Africa

Data: US Census Bureau, International Programs, International Data Base; World Bank Databank; World Health Organization

# Figure 3 | Human population



**Figure 3: Change in world cereal production, yield and land use from 1961 to 2018**

### Interpreting this graph

Population and cereal production, yield and land use figures are indexed to the year 1961 (i.e. 1961 = 0).

Source: adapted from Our World in Data, <[https://ourworldindata.org/grapher/index-of-cereal-production-yield-and-land-use?country=~OWID\\_WRL](https://ourworldindata.org/grapher/index-of-cereal-production-yield-and-land-use?country=~OWID_WRL)>, CC BY, based on data from World Bank and UN FAO; licensed CC-BY 4.0 <<https://creativecommons.org/licenses/by/4.0/>>