



**Victorian Certificate of Education  
2006**

**GEOGRAPHY**  
**Written examination**

**Day Date 2006**

**Reading time: \*.\*\* \*\* to \*.\*\* \*\* (15 minutes)**

**Writing time: \*.\*\* \*\* to \*.\*\* \*\* (2 hours)**

**DATA BOOK**

**Directions to students**

- 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.**

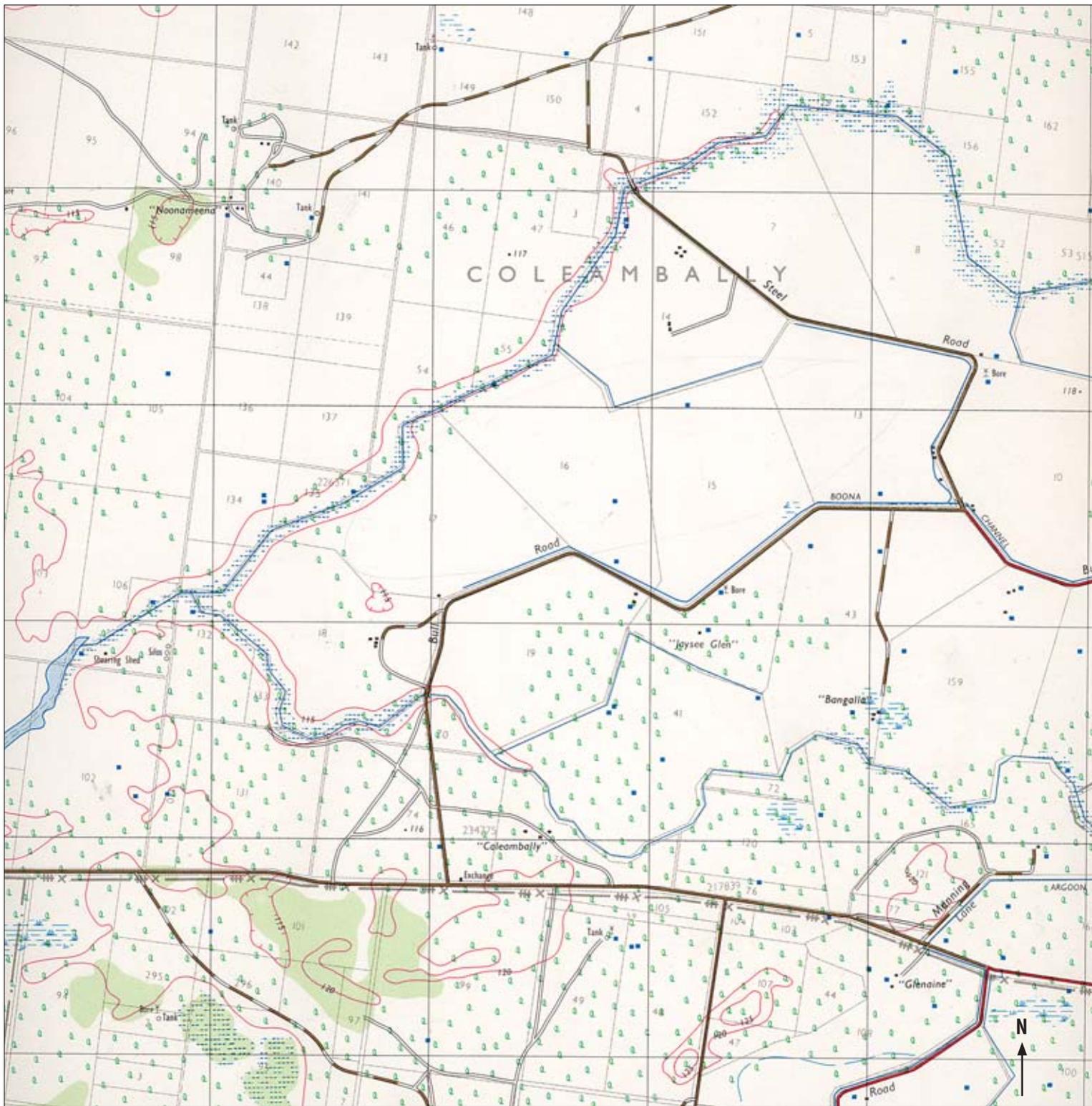


Figure 1 (a): Coleambally map extract

0 3 km  
contour interval 5 metres

Source: © DEPARTMENT OF LANDS  
Panorama Avenue BATHURST 2795  
[www.lands.nsw.gov.au](http://www.lands.nsw.gov.au)

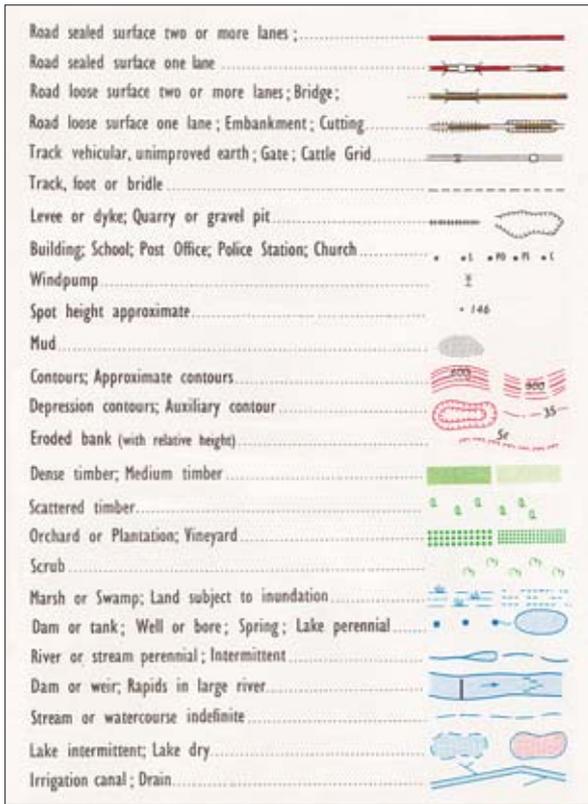


Figure 1 (b): Key to Figure 1 (a)

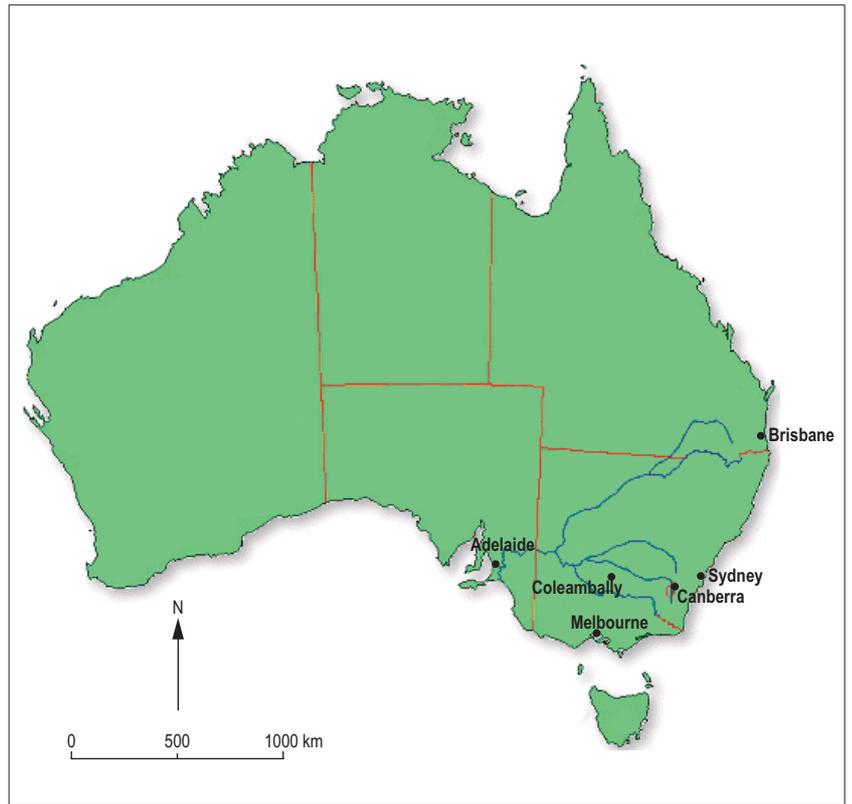


Figure 1 (c): Location of Coleambally Irrigation Area

**Figure 1 (d):**

**Background information**

The map extract, Figure 1(a), shows a very small section of the Murray-Darling Basin in southwest New South Wales. The map area is part of the Riverina District and more specifically, part of the Coleambally Irrigation Area.

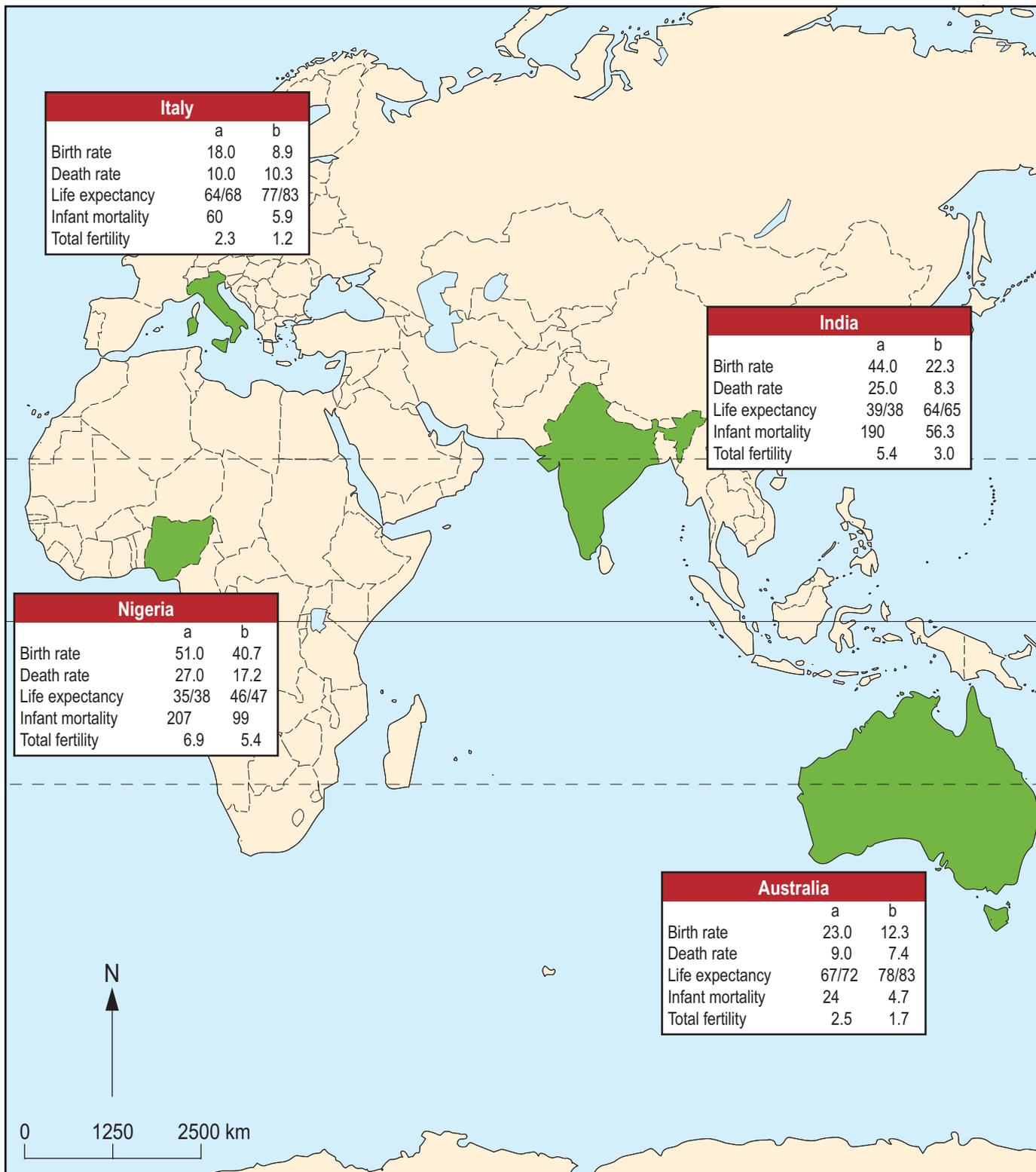


Figure 2 (a): Selected population dynamics

Figure 2 (b): Key

**Birth rate**

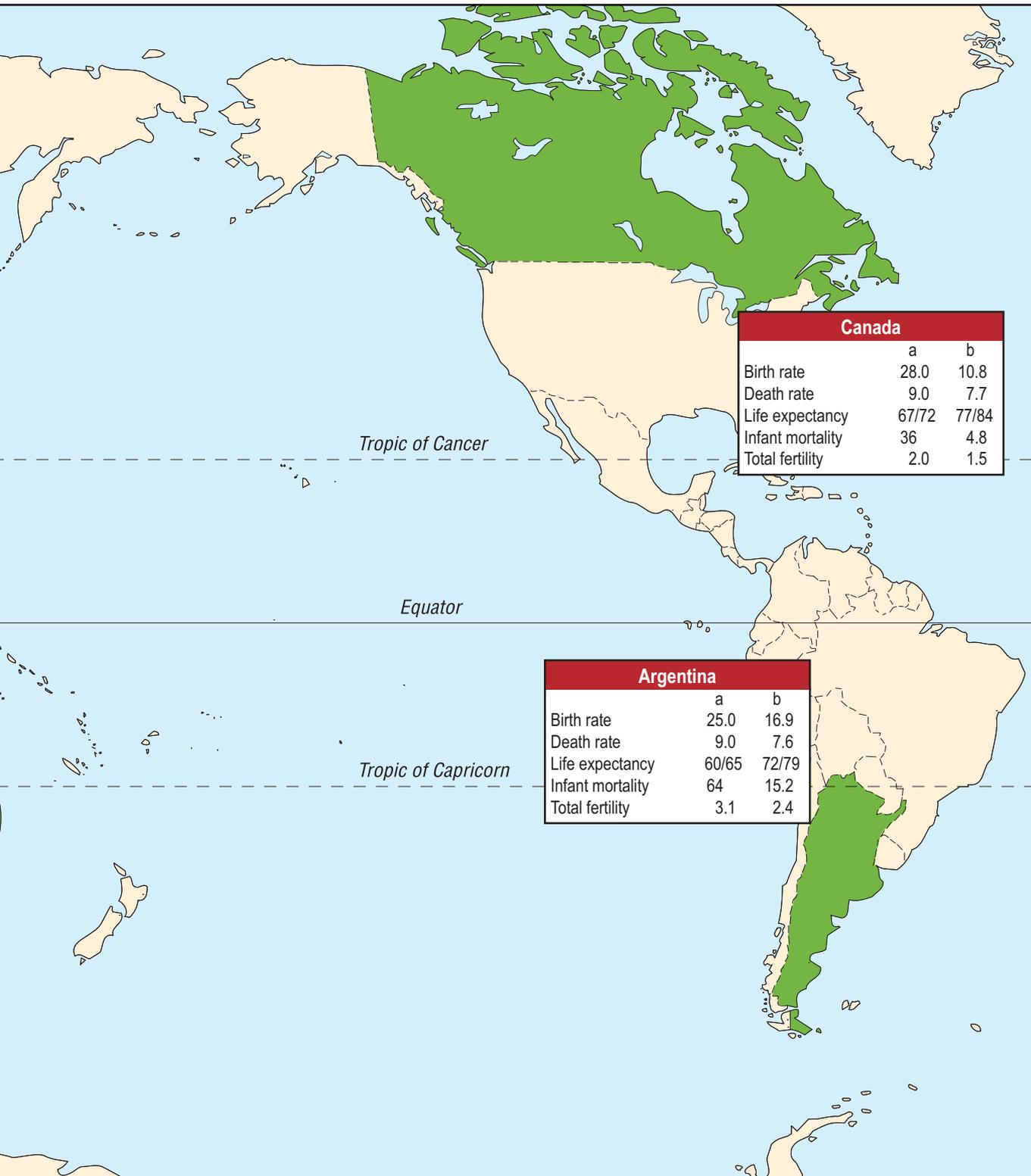
Average number of births per 1000 people  
 a 1950–55 average  
 b 2005 estimate

**Death rate**

Average number of deaths per 1000 people  
 a 1950–55 average  
 b 2005 estimate

**Life expectancy**

Average expected years  
 male/female  
 a 1950–55 average  
 b 2005 estimate



of life from birth,	<b>Infant mortality</b>	<b>Total fertility</b>
	Average number of infant deaths per 1000 children born in a year	Average number of births per woman in her lifetime
	a 1950–55 average	a 1970–75 average
	b 2005 estimate	b 2000–05 average

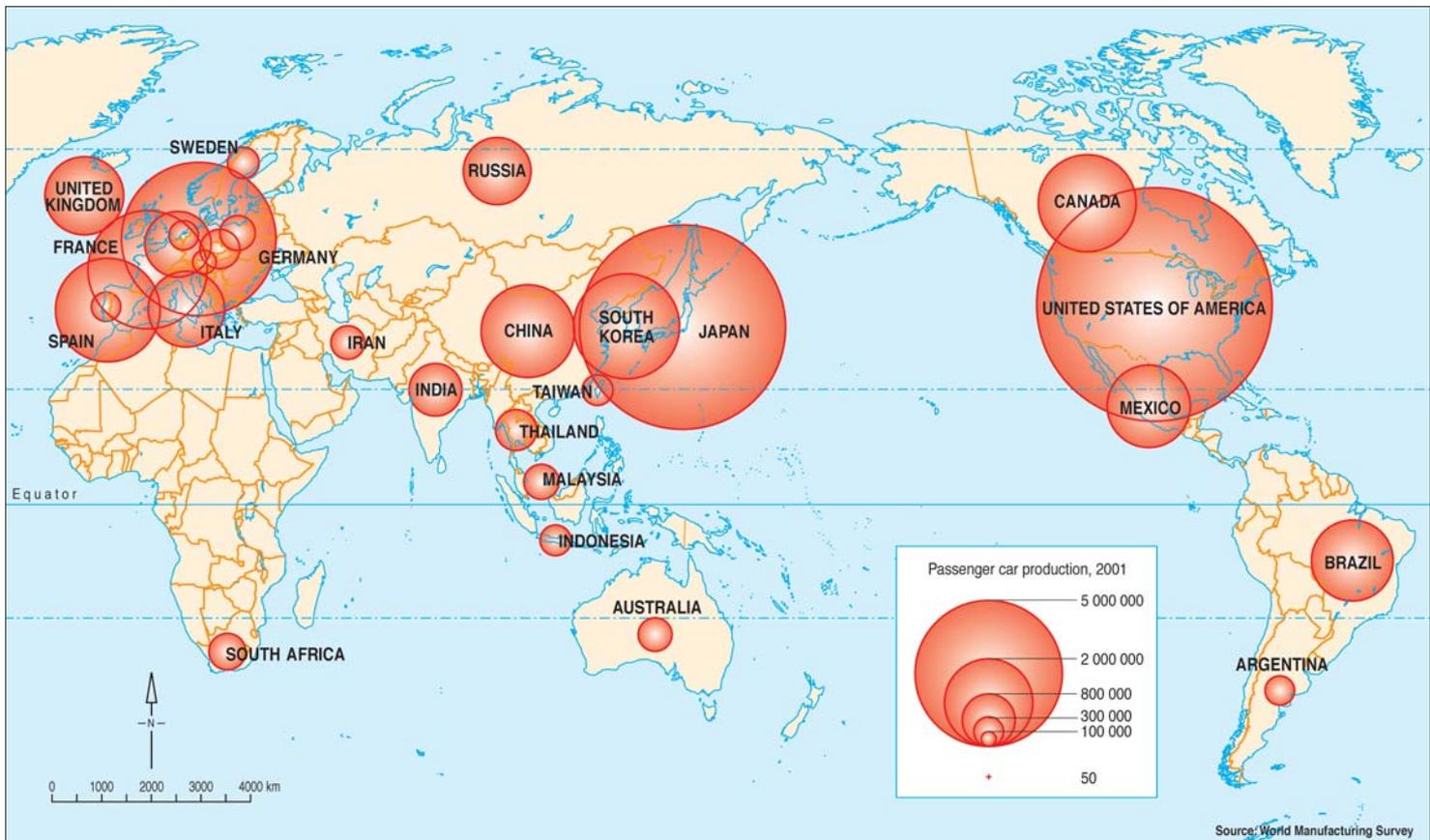


Figure 3 (a): Producing countries of passenger cars, 2001

Figure 3 (b): Responses to the global phenomenon of world passenger car production

### Car manufacturing

Passenger car manufacturing involves more than the use of raw materials of steel, iron, rubber, plastics and aluminium. It uses large amounts of substances that deplete the ozone layer, add to greenhouse gases and use huge quantities of energy. An estimated average of 27 tonnes of waste is produced during the manufacture of one car.

(One Earth)

### More efficient cars

In the United States, government policies are increasingly aimed at reducing passenger car fuel use. These policies are the result of increasing numbers of cars on roads together with the cost of importing crude oil and/or the desire to improve local environmental quality. The improvements in vehicle efficiency have been largely offset by increases in car sizes and car traffic. US car manufacturers are already in a partnership with the US government aimed at producing passenger cars with triple the fuel economy of the early 90s.

(United Nations Intergovernmental Panel on Climate Change)

### Cars in the developing world

Many parts of the developing world are faced with severe environmental problems caused in part by a rapid growth in the use of personal vehicles – scooters, motorcycles, mopeds and cars. The result is traffic congestion, greater fuel consumption and noise and air pollution that degrade the urban environment. In six Indian cities it was found that by improving public transport to meet up to 80 per cent of total travel demand, together with promoting cleaner fuels and improved engine technologies, significant environmental benefits can be achieved.

(United Nations Intergovernmental Panel on Climate Change)

### More cars, more roads, more crashes

- New and wider roads are needed to accommodate more cars. These roads need raw materials for construction, use land that was previously used for farming, recreation and urban residences.
- Freeways and traffic intersections divide communities in rural and urban areas alike.

- Natural habitats are often threatened by road construction near sensitive areas.
- New road building leads to increased car use in the long term rather than permanently solving traffic flow problems.
- Road crashes produce 800 000 permanently handicapped people every year, globally. Death estimates vary between 0.5 million to over one million with another 10 million estimated to be injured.

(A SEED, European organisation)

### South Australia boosts position as major car producer

South Australia, which already produces about 50 per cent of vehicles built in Australia, is set for further developments. Mitsubishi Motors assembles its Magna range in Adelaide, employing 3200 people. The company has announced plans for an export drive that will increase car production and local employment. Holden has announced a five-year expansion of its Elizabeth plant, which employs more than 4200 people.

(Directions for South Australia, 2001)

### The value of passenger car production: Malaysia

Malaysia has developed as a passenger car producer. Its Proton company was founded in 1983 with production largely based on technology transfer from foreign car makers such as Citroen (based in France) and Mitsubishi (based in Japan). In 1996 Proton purchased Lotus (based in the UK) providing the company with engineering research.

Despite uneven sales over the last ten years, Proton has significant value to its home country. Prime Minister Mahathir said in May 2000: 'Proton identifies us as a nation of equal importance to other automotive producing nations'. The company is now producing many of its own components, thus creating local jobs and reducing the import of

components. The next step is locally produced engines. Proton's development has been behind substantial tariffs on car components and assembly kits for its rivals. Taxes of 300% existed on imported complete cars. Such protection will disappear by 2005 under Free Trade Area agreements within Southeast Asia. Deals with international companies such as DaimlerChrysler, Ford and General Motors could see Proton models produced elsewhere in the world using these companies' plants and marketing. Already Mitsubishi owns 16 per cent of Proton and DaimlerChrysler is buying 34 per cent of Mitsubishi. These global alliances could assure local identity for Proton's products and give it markets large enough for new products and cost-effective levels.



Figure 3 (c): Part of Singapore's Electronic Road Pricing System

### Car control

Some cities such as London and Singapore are restricting car movements into their city centres through tolls. Singapore's Electronic Road Pricing System (ERP) charges by the time of day as well as the type of vehicle involved.