

International General Certificate of Secondary Education  
CAMBRIDGE INTERNATIONAL EXAMINATIONS

**GEOGRAPHY**  
PAPER 2

**0460/2**

**MAY/JUNE SESSION 2002**

1 hour 45 minutes

Additional materials:  
Answer paper  
Ruler

**TIME** 1 hour 45 minutes

**INSTRUCTIONS TO CANDIDATES**

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer any **three** questions.

Write your answers on the separate answer paper provided.

If you use more than one sheet of paper, fasten the sheets together.

**INFORMATION FOR CANDIDATES**

The number of marks is given in brackets [ ] at the end of each question or part question.

Sketch-maps and diagrams should be drawn whenever they serve to illustrate an answer.

The Insert contains Fig. 1.

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**This question paper consists of 10 printed pages, 2 blank pages and an insert.**

- 1 Tables 1 and 2 give information on the population of Indonesia, a country made up of many islands in Asia.

**Table 1 Population density and farm size for Indonesia**

1	2	3
Location	Population density (persons per km <sup>2</sup> )	Farms less than 0.5ha (percentage)
Inner Islands		
Java	774	63
Bali	223	46
Outer Islands		
Sumatra	70	27
Kalimantan	15	19
Sulawesi	51	25
Irian Jaya	33	24

**Table 2 Population data for Indonesia**

The population of Indonesia is over 200 million (over 90% live in Java and Bali).
The annual population growth rate is 1.8%.
65% of Indonesia's population live on 7% of the land area of the country.
80% of Java's population live in the countryside; many do not have enough land to grow crops to feed their families.

- (a) (i) Using data from Table 1 on Bali and Irian Jaya, complete the graph (Fig. 1, Insert). [2]  
 (ii) What relationship is shown by the graph you have now completed? [1]
- (b) (i) The government of Indonesia has encouraged people to migrate from the Inner Islands (Java and Bali) to the Outer Islands of Indonesia. This voluntary migration of people is known as transmigration. With the help of information from Tables 1 and 2, suggest reasons why the government of Indonesia has encouraged this migration. [4]  
 (ii) Apart from transmigration, what other measures may be taken by the Indonesian government to try to improve the lives of people living in rural areas of the Inner Islands of the country? [4]
- (c) (i) Jakarta, the capital of Indonesia, is one of the world's largest cities. Its population is now over 13 million and is growing rapidly (4% per year).  
 Describe the problems for large cities, such as Jakarta, as a result of rapid population growth. [5]  
 (ii) Explain why large cities, such as Jakarta, find it difficult to reduce the effects of problems you have described in (c)(i). [3]
- (d) Now study Fig.2 below which shows how reduced employment opportunities in rural areas may bring about other changes. Use this diagram and other information you may know to explain why, in many parts of the world, large numbers of people move away from rural areas. [6]

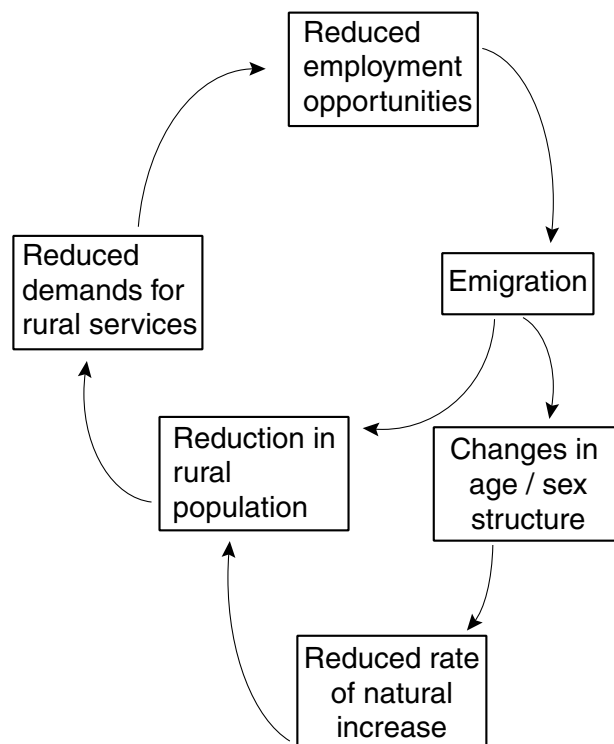


Fig. 2

2 (a) Fig. 3 (opposite) shows land use in and around a town to the north of London, the capital and major city of the United Kingdom.

(i) Describe the distribution of residential areas shown in and around the town. [6]

(ii) Suggest how the pattern of land use may have developed for the area shown to the south of line X – Y. [6]

(iii) Fast rail links make it possible to travel from the town to London in less than 1 hour.

Suggest why some people living in the town welcome this fast rail link and suggest why others are less enthusiastic about it. [7]

(b) Fig. 4 shows developments which may take place in and around towns and cities. With reasons, give your views about the developments shown. [6]

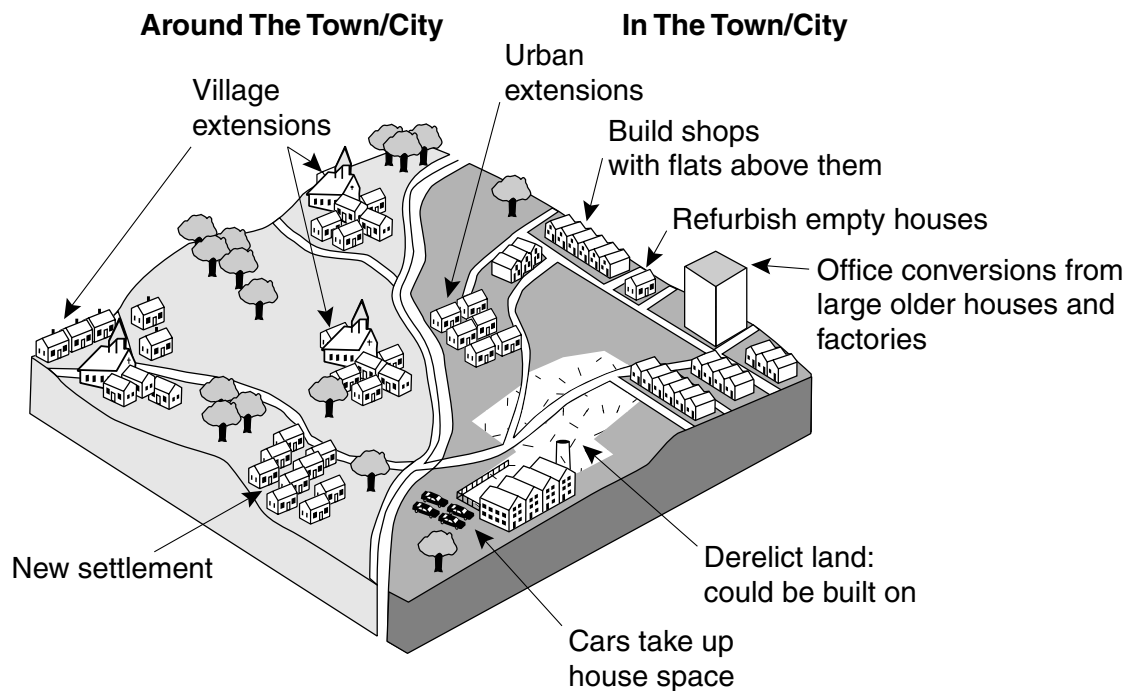


Fig. 4








- |     |                           |   |                 |                     |
|-----|---------------------------|---|-----------------|---------------------|
| S   | Modern Shopping Centres   |  | Mainly pre-1914 | } Residential Areas |
| CBD | Central Business District |  | 1914-1939       |                     |
| V   | Old Village Centre        |  | Since 1945      |                     |
| C   | Commuter Village          |  | Older           | } Industrial Areas  |
|     |                           |  | Newer           |                     |

Fig. 3

## 3 (a) Study Fig. 5.

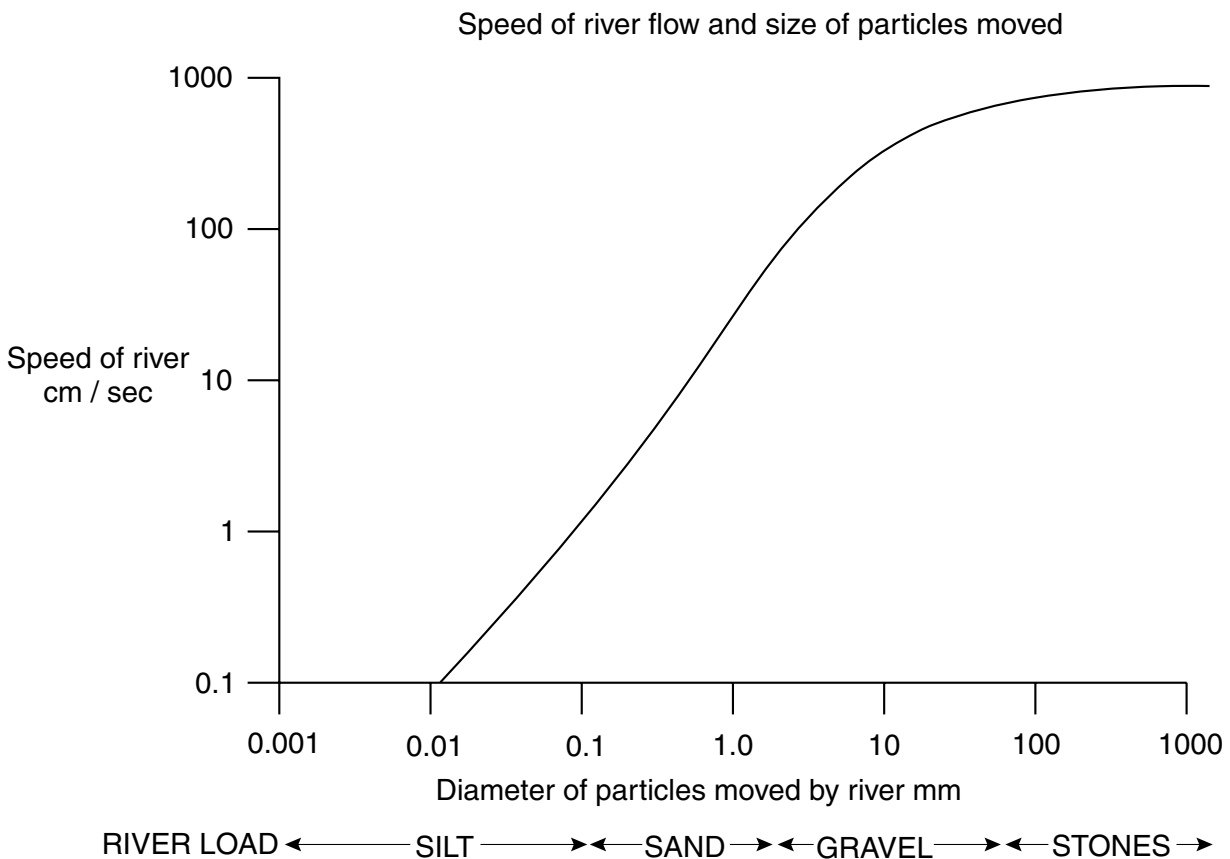


Fig. 5

- (i) What general relationships are shown by the graph? [2]
- (ii) Describe how different river processes might transport different sized particles, as shown in Fig. 5. [3]
- (b) What factors affect the speed of flow of a river both in different parts of its course and in different parts of its channel? [6]
- (c) (i) Explain how a valley glacier may be formed. [3]
- (ii) Name and describe the two main methods by which a valley glacier carries out its work of erosion. [6]
- (iii) Explain how the action of frost leads to the formation of scree at the foot of mountain slopes in temperate regions. [5]

4 (a) The four weather graphs **W**, **X**, **Y** and **Z** (Fig. 6) were drawn from information obtained at a school weather station over 7 days.

(i) State

**A** the daily range of temperature on Day 2,

**B** the pressure on Day 7,

**C** the rainfall on Day 5.

[3]

(ii) How are the values in Graph **X** obtained?

[3]

(iii) The information for Graph **Z** was obtained from a rain gauge. Explain how a rain gauge is used to measure the rain that has fallen.

[4]

(b) (i) What features of the climate at Place **M** given below suggest that it has a Mediterranean climate?

[4]

Climate data for Place **M** (altitude 100 m)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
temperature / °C	10	10	12	16	20	25	28	28	24	20	15	11	
rainfall / mm	62	37	37	23	23	14	6	7	15	51	56	71	Total 402

(ii) What factors influence the features of a Mediterranean climate?

[5]

(c) Describe the main features of the natural vegetation of Mediterranean regions and explain how these are influenced by climate.

[6]

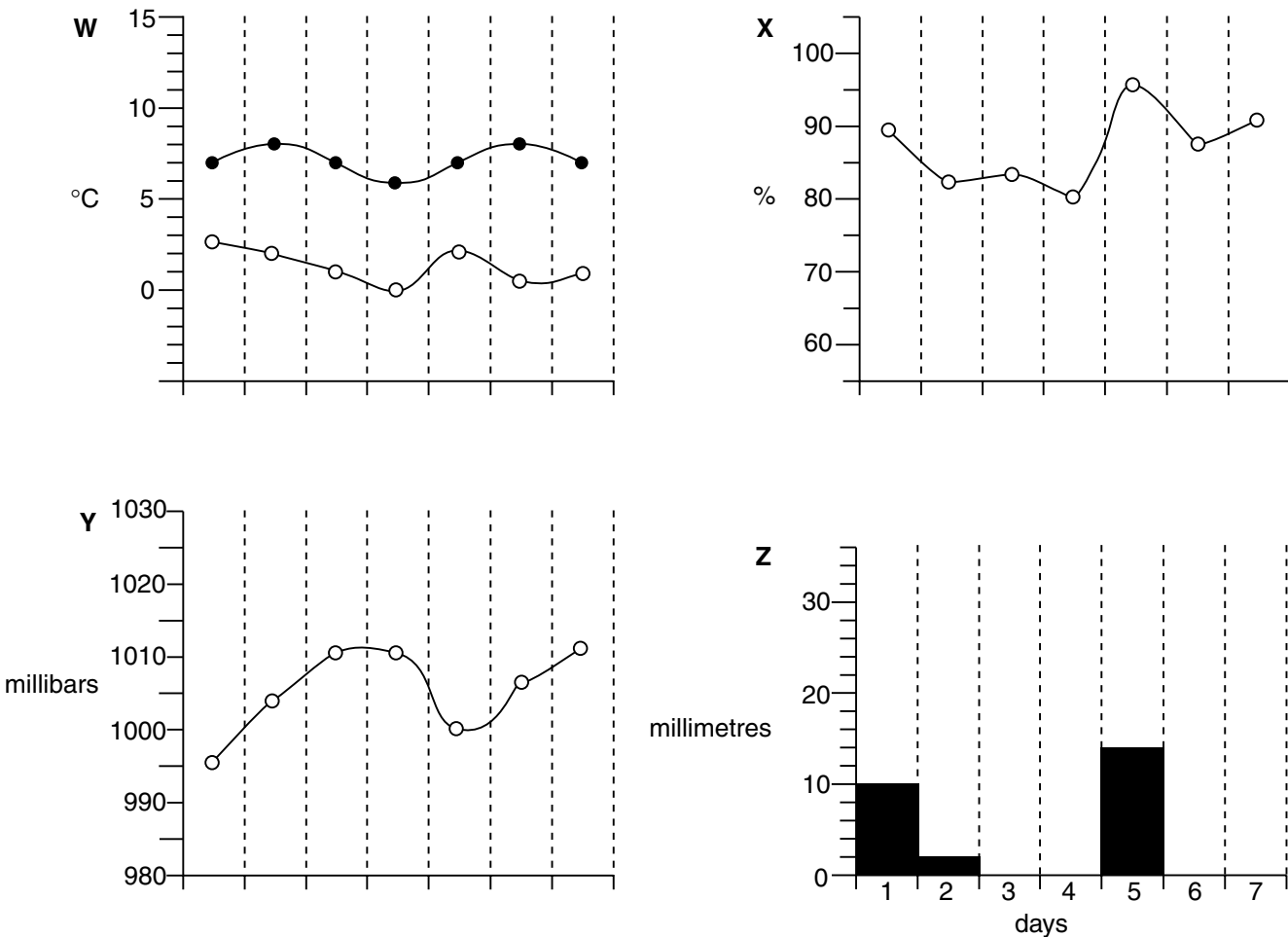


Fig. 6

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[Turn over

5 Fig. 7 shows a factory system for manufacturing industry.

Use the diagram to help you answer (a), (b) and (c).

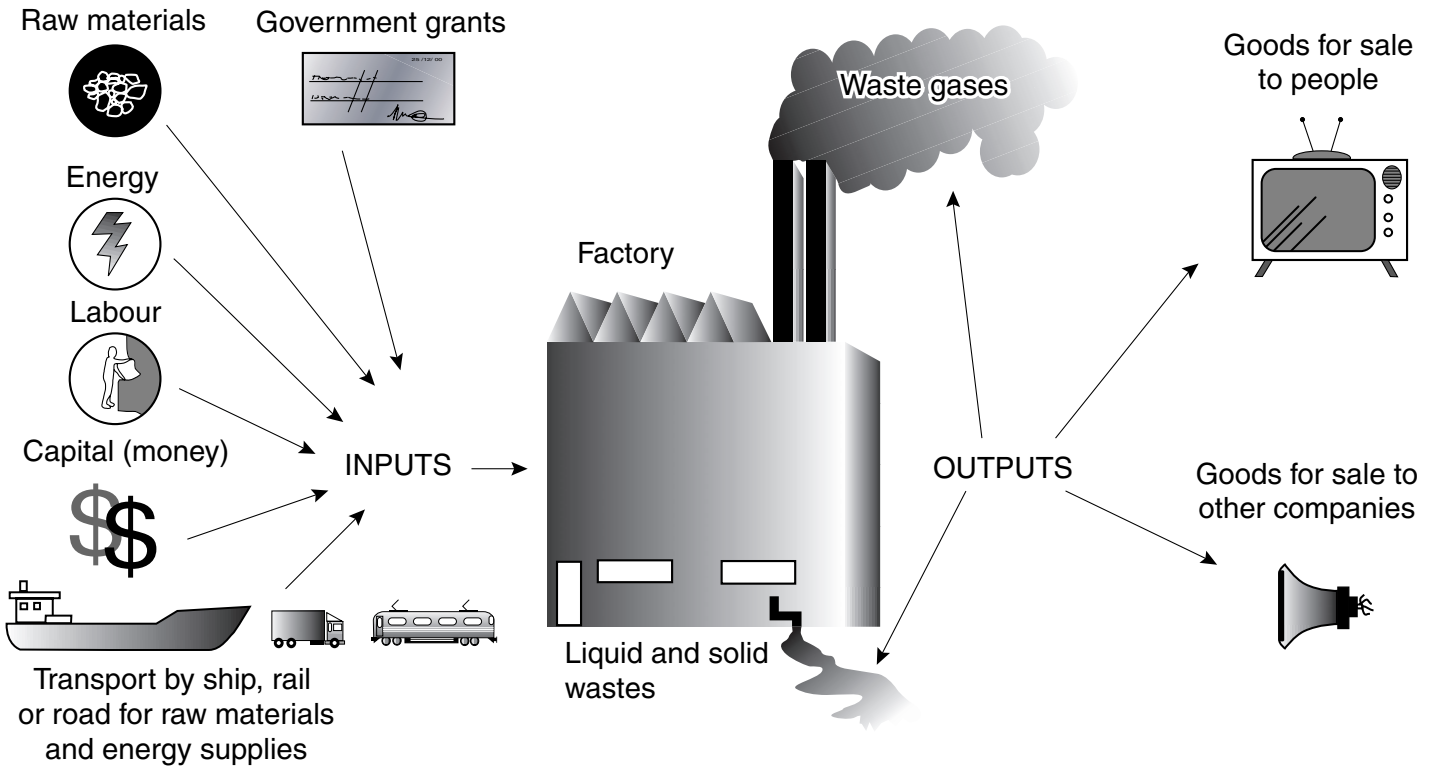


Fig. 7

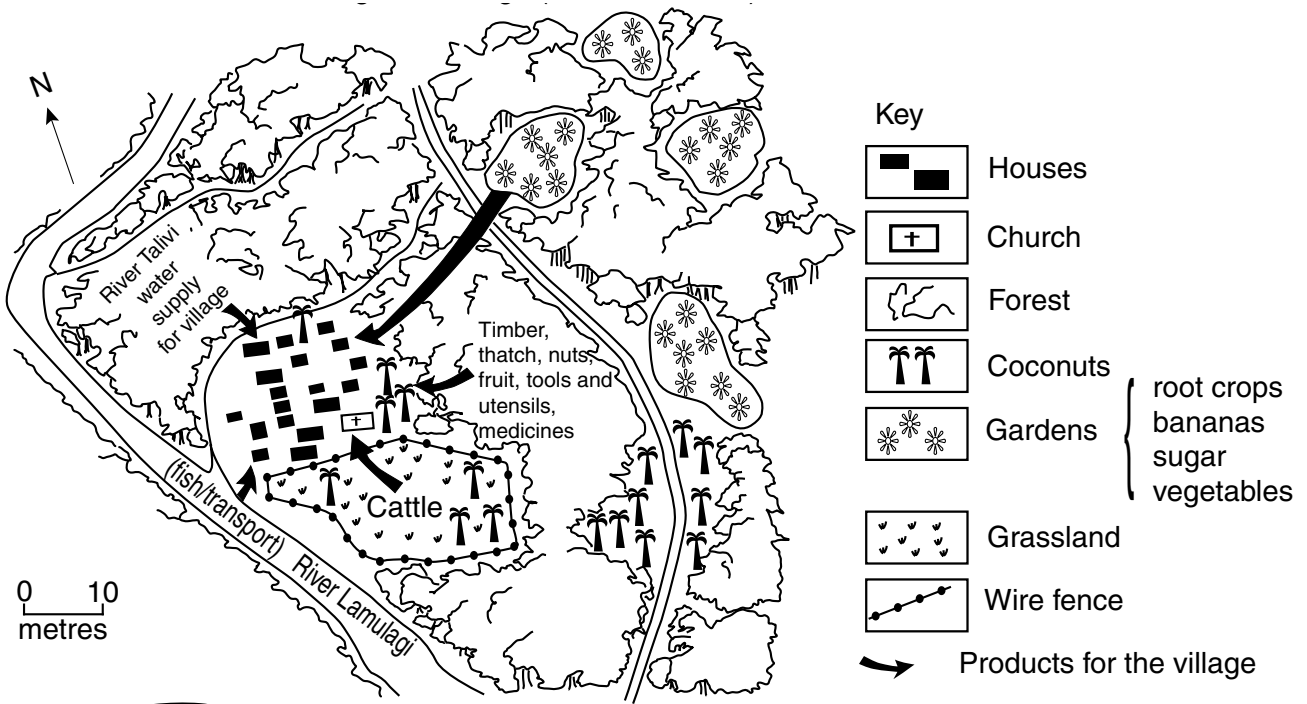
- (a) (i) Explain how inputs have influenced the development of the motor vehicle assembly industry at a named location you have studied. [7]
- (ii) What factors may influence the size of the market area for a motor vehicle assembly plant? [4]
- (b) Fig. 7 suggests that some of the outputs from manufacturing industries are for sale
- A** to people,
- B** to other industries.
- From studies you have made, state examples of **each** of these types of output. [4]
- (c) Fig. 7 also shows that the outputs from some industries are waste products.
- (i) Explain why these waste products may cause problems for people and the environment. [6]
- (ii) How can the problems you described in (c)(i) be reduced? [4]



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6 (a) Fig.8 provides information on land use in an area of tropical rain (evergreen) forest in the Solomon Islands, located in the Pacific Ocean.

**Land use in Kologhona Village (Solomon Islands)**



Like all the families in the village I cultivate my 'garden' by bush-fallow farming.

Using an axe and bushknife I clear away all but the largest trees. The branches are left on the ground to dry. I pile all these branches around the tree stumps and burn them.



The fire clears the ground, kills off some weeds and pests and the ash fertilizes the ground. I plant the crops in holes made with a digging stick. After that I go to the garden from time to time to weed and harvest the crops. After 2 or 3 years we just leave the garden for the forest to regrow.

(Bush-fallow farming is also known as shifting cultivation)

**Fig. 8**

- (i) Describe the small-scale subsistence farming shown in Fig. 8. [7]
- (ii) Timber companies are exploiting forest in parts of the Solomon Islands.  
How would the lives of people in villages, such as Kologhona, be affected if forest from around the village was removed? [6]
- (b) From studies you have made of a system of small-scale **cash crop** farming:
- (i) name a specific area where it is practised, [1]
- (ii) give details of the main inputs favouring cultivation, [5]
- (iii) describe the processes used in the farming system, [4]
- (iv) suggest why farming is practised on a small-scale. [2]

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Question 6. Fig. 8 © Choices – Development – Solomon Islands. World Wide Fund.

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