

Answer all questions.

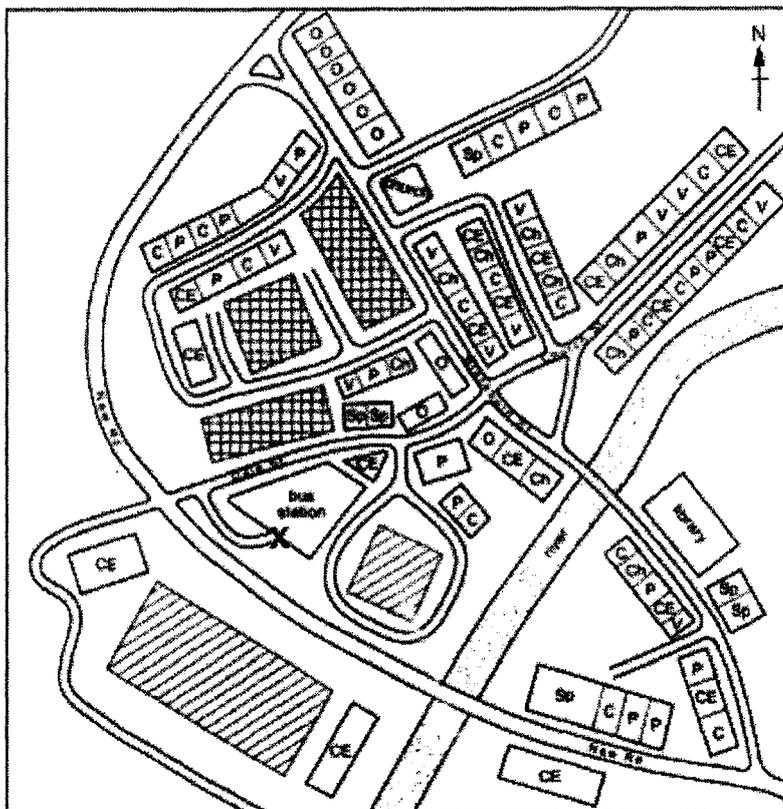
1 Cluster 1: Geography in Everyday Life

A group of students in the United Kingdom wanted to investigate causes of air pollution in their city area and residents' opinions on strategies taken to reduce it. They went to the city area on a weekday and used a closed-ended questionnaire survey to collect the views of the residents.

They divided themselves into two groups, with one group interviewing the first 50 residents who are less than 50 years old and the other group interviewing the first 50 residents who are above 50 years old. Each group of students interviewed 50 residents.

They conducted their questionnaire at the location labelled X shown in Fig.1.1. A copy of their questionnaire is in Fig. 1.2 (Insert).

Land use map of the city area in the United Kingdom



Key:

Household goods store	
Supermarket	////
Convenience goods store	C
Specialist store non-food (e.g. florist, travel agent)	Sp
Personal services (e.g. hairdresser, nail parlour)	P
Charity shop	Ch
Cafe	CE
Offices	O
Vacant shop space	V

Fig. 1.1

(a) Explain the advantages and a safety concern of conducting their questionnaire at location X.

Table 1.1 shows the information collected by the students and Fig. 1.3 shows their partially completed graph.

Table 1.1

Types of air pollution and their origin

types of air pollution \ origin of air pollution (%)	transportation	fuel burning	industrial processes	construction and agriculture
carbon monoxide	85	5	10	0
dust and airborne particles	1	2	2	95
nitrogen oxides	49	47	4	0
sulfur oxides	3	85	10	2
others	35	3	62	0

Types of air pollution and their origin

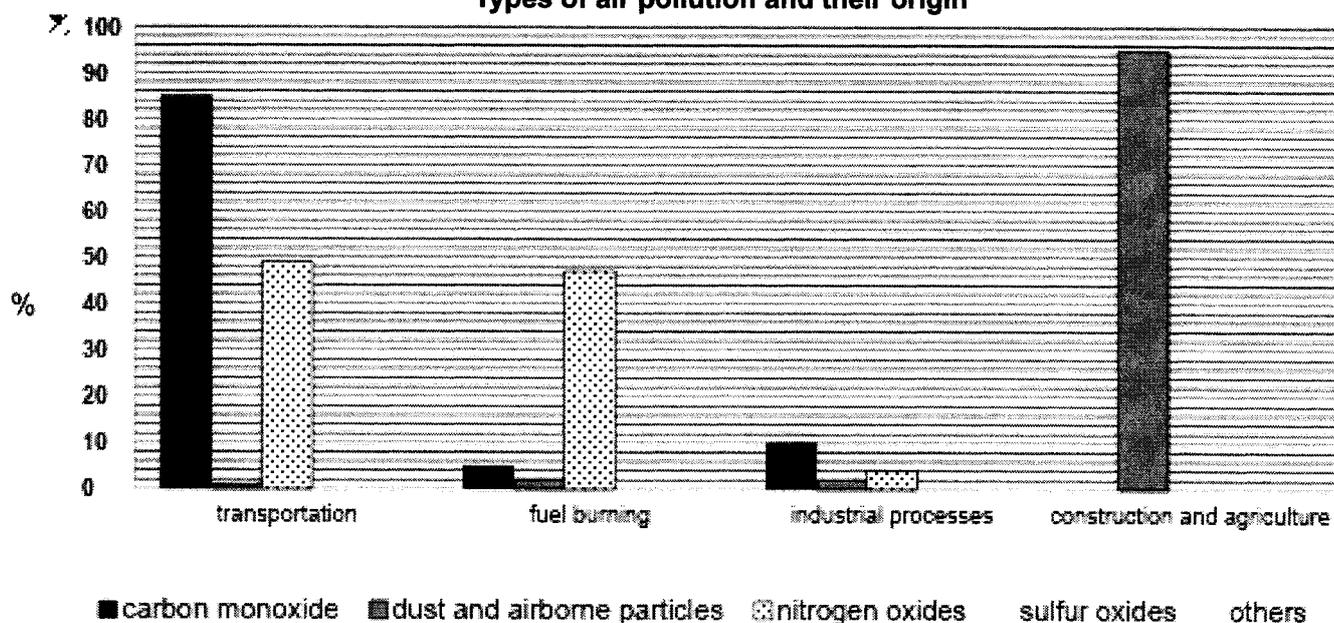


Fig. 1.3

- (i) Use the information in Table 1.1 to complete the bar graph in Fig. 1.3 for transportation and industrial processes. [2]
- (ii) Describe one other graphical method the students could use to present the data in Table 1.1.

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(c) The students created a list of strategies to reduce air pollution and classified them as nature-based or policy-based. They wanted to test the hypothesis: *'People are more supportive of nature-based strategies compared to policy-based strategies to reduce air pollution'*.

When conducting the questionnaire, the students decided to show respondents photographs of how other cities have adopted these strategies to reduce pollution, as seen in Figs. 1.4A (Insert) and 1.4B (Insert).

Table 1.2 shows the results of the close-ended questionnaire survey conducted on respondents' opinion of strategies to reduce air pollution in their city.

Table 1.2

Respondents' opinion of strategies to reduce air pollution in their city

strategies to reduce air pollution	classification	<50 years old		> 50 years old	
		support the strategy	do not support the strategy	support the strategy	do not support the strategy
plant more trees	nature-based	41	9	32	18
promote green walls and green roofs	nature-based	30	20	29	21
create more green spaces and parks	nature-based	35	15	39	11
build extensive network of cycling lanes	policy-based	23	27	12	38
provide subsidies for electric cars	policy-based	39	11	42	8
introduce car free days on weekends	policy-based	21	29	9	41

(i) To what extent does the data in Table 1.2 support the students' hypothesis?

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(ii) With reference to Table 1.2, explain some factors which could have influenced how supportive respondents are of the various strategies.

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(d) Evaluate the data collection methods used by the students.

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2 Cluster 2: Tourism

(a) Study Fig. 2.1, which shows tourist arrivals to Thailand from 2015 to 2023.

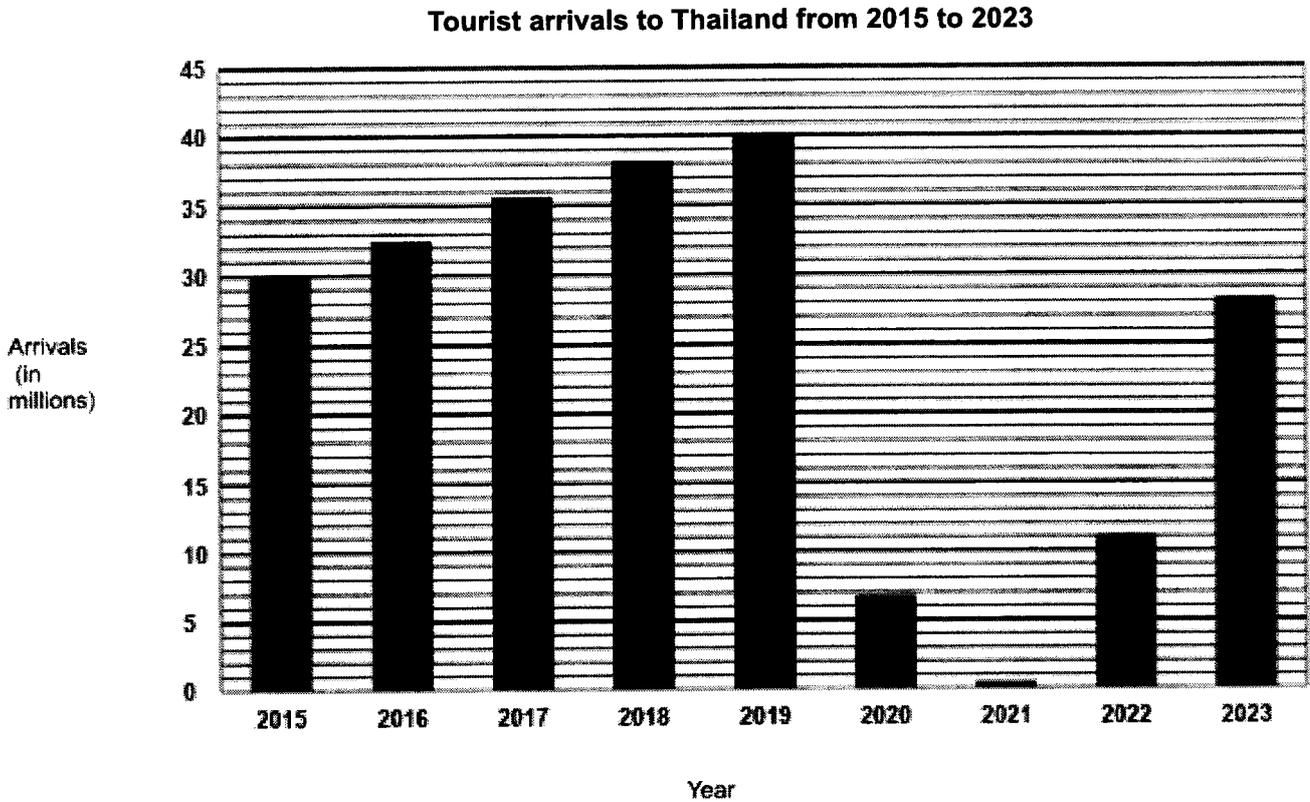


Fig. 2.1

Using Fig. 2.1, describe the trends in tourist arrivals to Thailand from 2015 to 2023.

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(b) Study Fig. 2.2A (Insert), which shows the location of hotels in Saint Lucia, a country in the Caribbean, and Fig. 2.2B (Insert), which shows other information about Saint Lucia.

(i) Using Fig. 2.2A, describe the location of hotels in Saint Lucia.

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(ii) Using Figs. 2.2A and 2.2B, account for the location of hotels in Saint Lucia.

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(c) Describe how online media has influenced the rise of niche travel.

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(d) Describe how tourism can result in positive environmental impacts.

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Question 1(b)	Figure 1.3	© http://www.cambridgeinternational/igcse/2024
Question 1(c)	Figure 1.4A	© https://www.theguardian.com/environment/2023/feb/01/planting-trees-cities-cut-deaths-summer-heat-study
Question 1(c)	Figure 1.4B	© https://www.stefanoeriarchitetti.net/en/project/vertical-forest
Question 2(a)	Figure 2.1	© https://www.statista.com/statistics/994693/thailand-number-international-tourist-arrivals/
Question 2(b)	Figure 2.2A Figure 2.2B	© https://www.pinterest.com/pin/pinrepincom--1829656091200542/
Question 2(c)	Figure 2.3	© https://www.worldatlas.com/maps/saint-lucia © https://www.huawei.com/en/tech4all/stories/restoring-mauritius-coral-reef-ecosystem
Question 3(b)	Figure 3.1A Figure 3.1B	© http://www.cambridgeinternational/igcse/2023 © http://www.cambridgeinternational/igcse/2023

Fig. 1.2 for Question 1

The closed-ended questionnaire survey used to collect respondents' view on strategies to reduce air pollution

· Are you a resident of this city?
 Yes No
(if no, thank you for your time)

· What is your age? (please tick)
 21 to 30 31 to 40 41 to 50 51 to 60 61 to 70 > 71

· Are you supportive of the following strategies to reduce air pollution in this city? (please circle)

Thank you for your time.

Fig. 1.4A for Question 1
Trees grown in Portuguese cities



Fig. 1.4B for Question 1
Green walls and green roofs in Milan, Italy

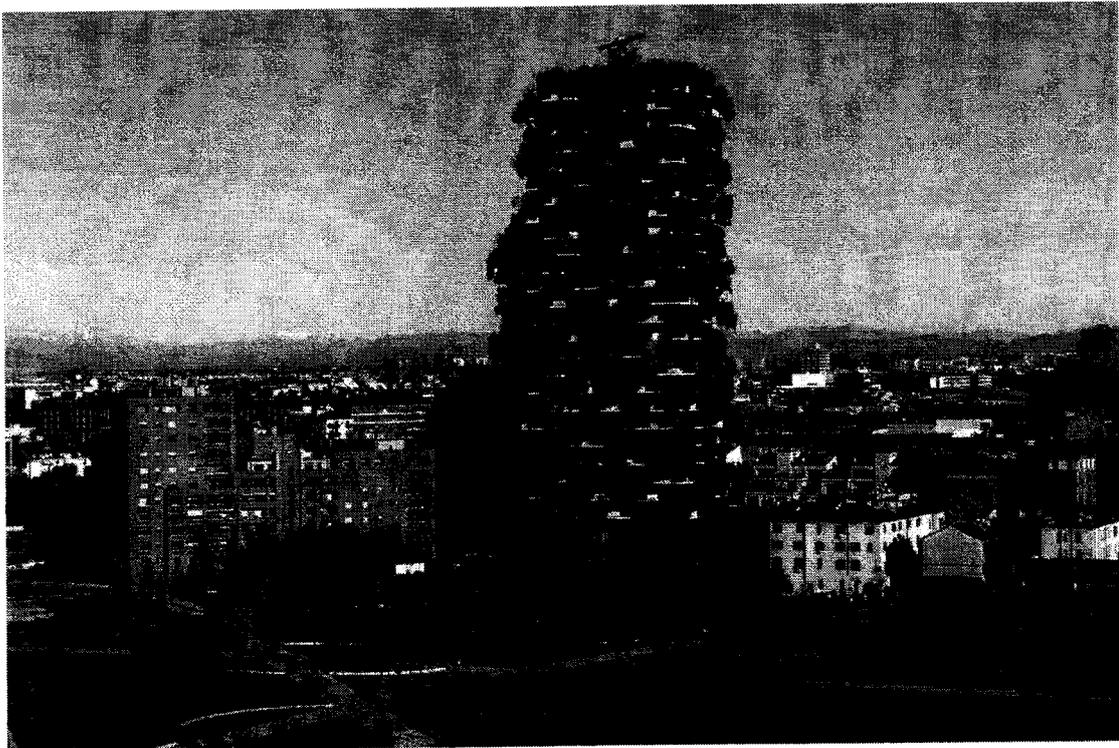


Fig. 2.2A for Question 2

Location of hotels in Saint Lucia

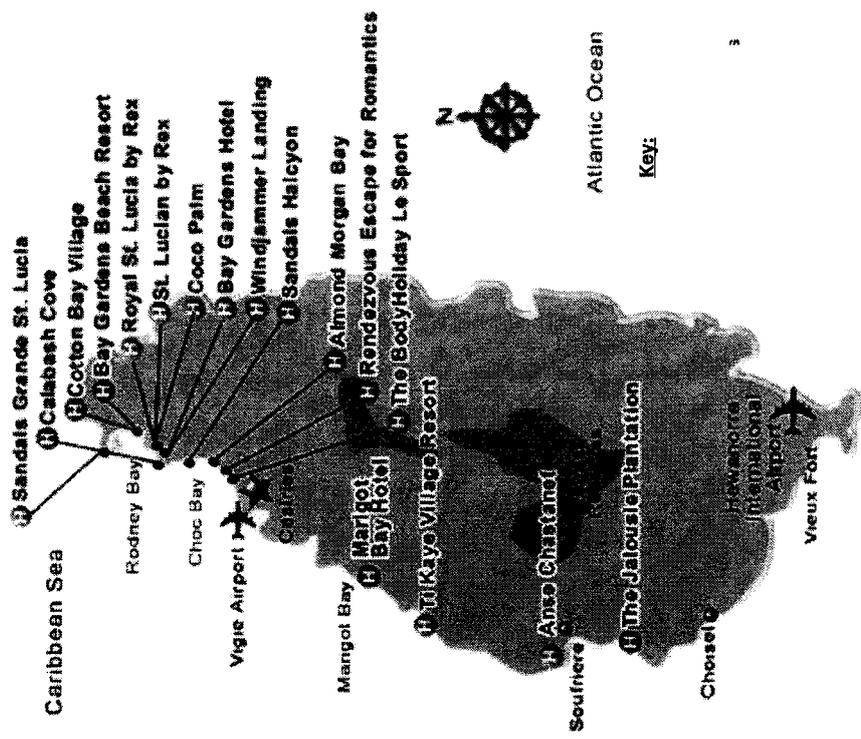


Fig. 2.2B for Question 2

Other information about Saint Lucia

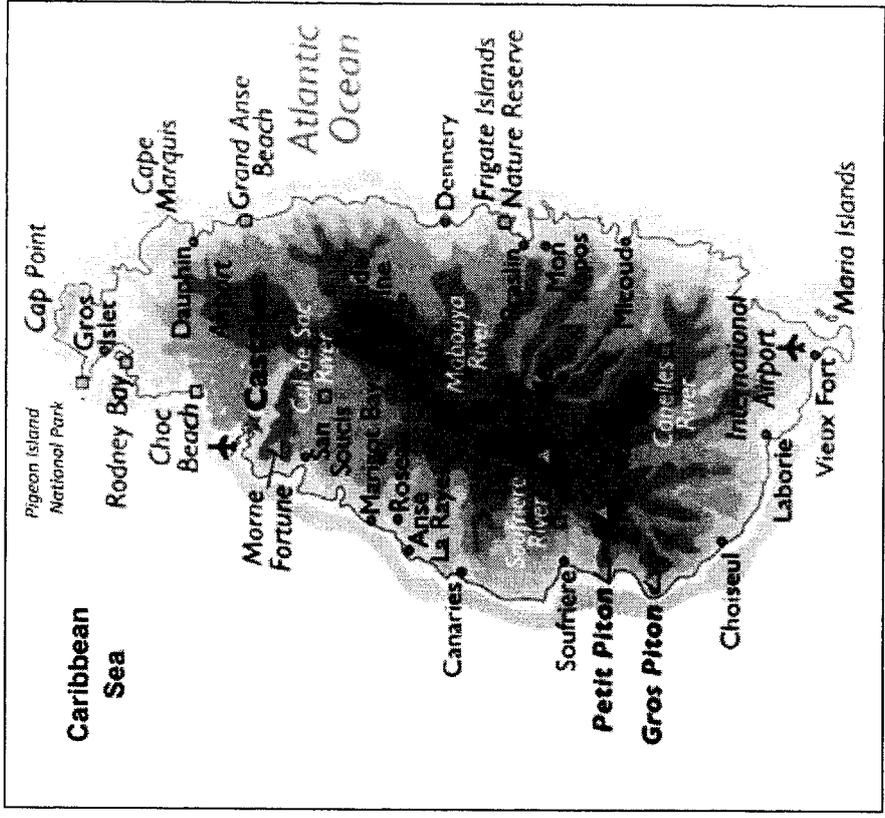


Fig. 3.1A for Question 3

Population density of the Netherlands

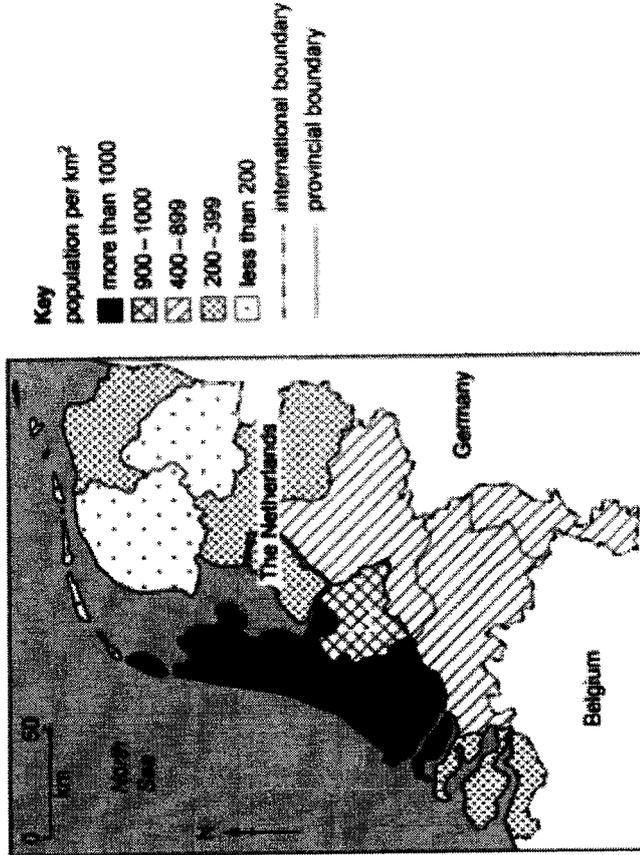
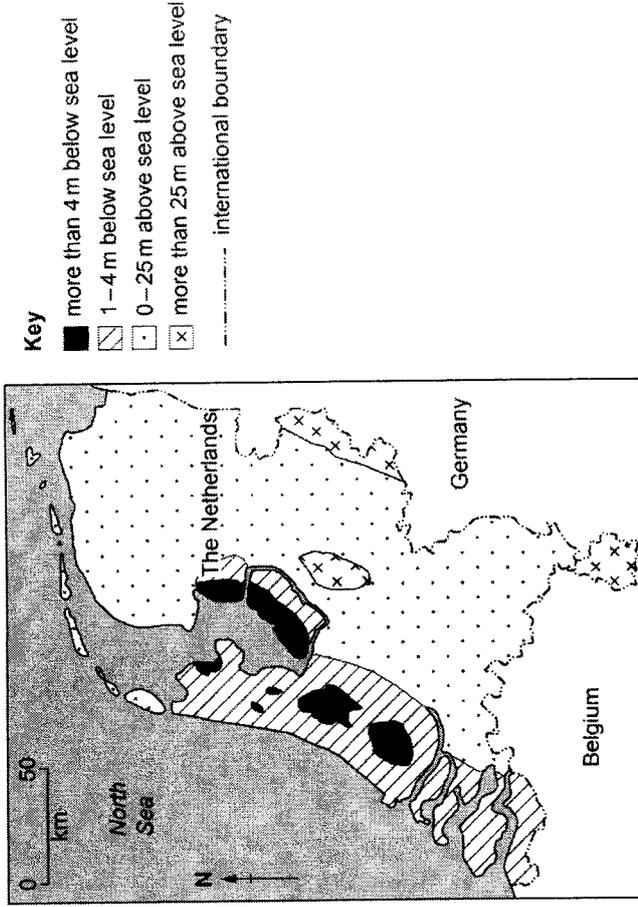


Fig. 3.1B for Question 3

Simplified relief map of the Netherlands



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(d) Study Fig. 1.3 (Insert), which shows the Singapore government's plans to rejuvenate Pasir Ris Town under the Remaking Our Heartlands Programme.

Using Fig. 1.3, evaluate the decision to rejuvenate Pasir Ris Town.

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(a) Study Fig. 3.1 (Insert), which shows the median age of marriage for women in Singapore and fertility rate from 1990 to 2024. Fertility rate refers to the average number of children a woman is expected to have during her lifetime.

Using Fig. 3.1, describe how the median age of marriage for women in Singapore affects the fertility rate.

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(b) Study Fig. 3.2 (Insert), which shows strategies to strengthen Singapore’s food security.

With reference to Fig. 3.2, explain how the strategies shown can help to strengthen Singapore’s food security.

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(c) Study Fig. 3.3A (Insert), which shows dengue fever cases reported across Singapore in 2020, and Fig. 3.3B (Insert), which shows the location of Housing Development Board (HDB) Towns in Singapore.

Using Fig. 3.3A and 3.3B, describe the distribution of dengue fever cases in Singapore.

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(d) Study Fig. 3.4A (Insert), which shows reclaimed areas and possible future reclamation areas in Singapore, and Fig. 3.4B (Insert), which shows the relief map of Singapore.

(i) Using Fig. 3.4A and Fig. 3.4B, account for the challenges that Singapore could face due to the frequent occurrence of earthquake hazards in the region.

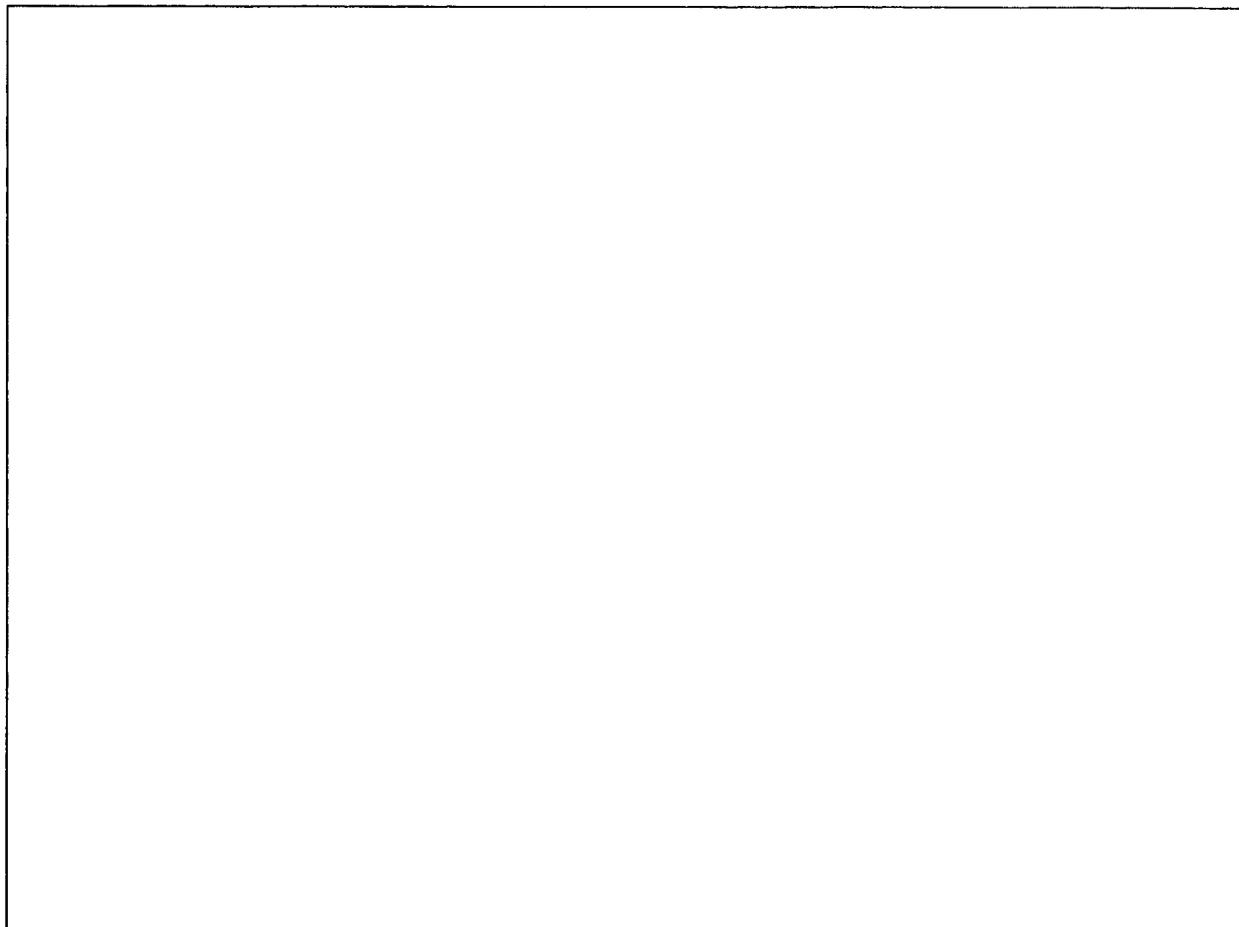
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(ii) Describe how national preparedness plans help Singapore to mitigate and adapt to tectonics hazards in the region.

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(e) Study Fig. 3.5 (Insert), which shows an aerial view of the Marina Bay area.

Sketch the Marina Bay area shown in Fig. 3.5. Annotate the sketch to show three features that help Singapore achieve social and environmental sustainability. [4]



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<https://www.myskillsfuture.gov.sg/content/portal/en/career-resources/career-resources/featured-courses/SkillsFuture-work-study-programmes1.html>

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Fig. 1.1 for Question 1

Community library at the void deck of a block of flats in a neighbourhood

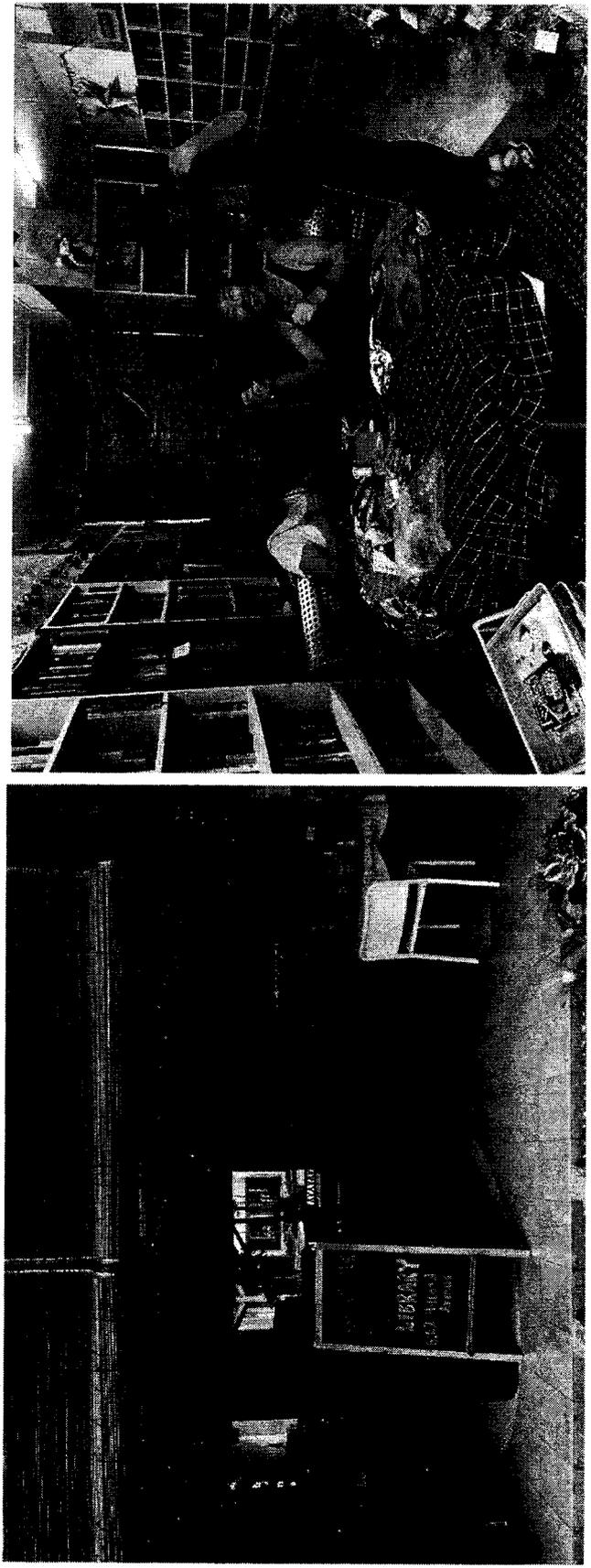
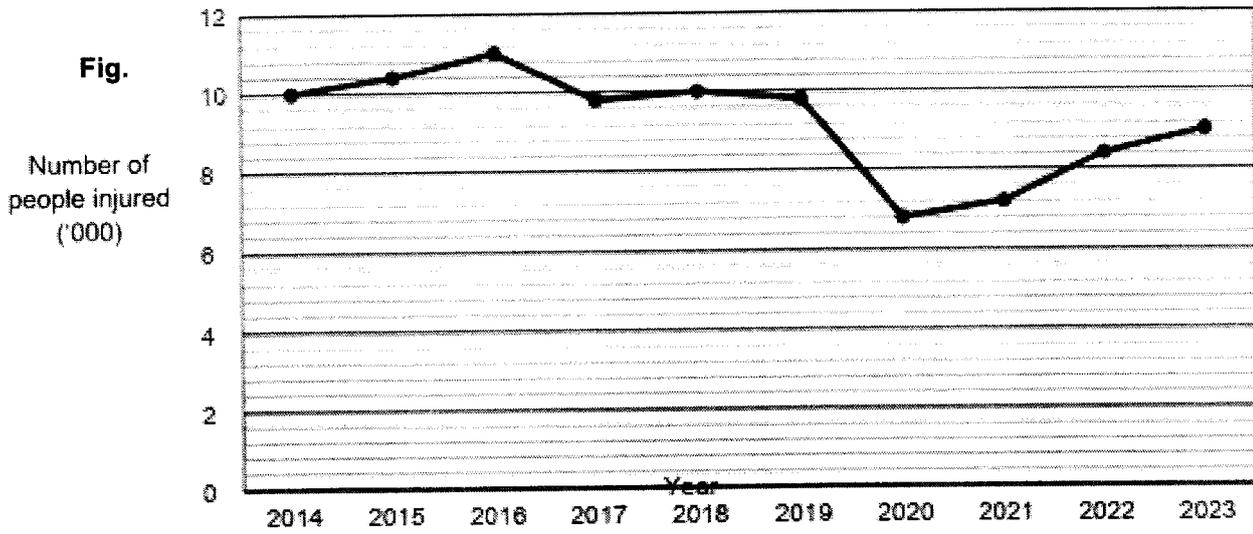


Fig. 1.2A for Question 1

Number of people injured in traffic accidents in Singapore



1.2B for Question 1

Number of fatalities in traffic accidents in Singapore

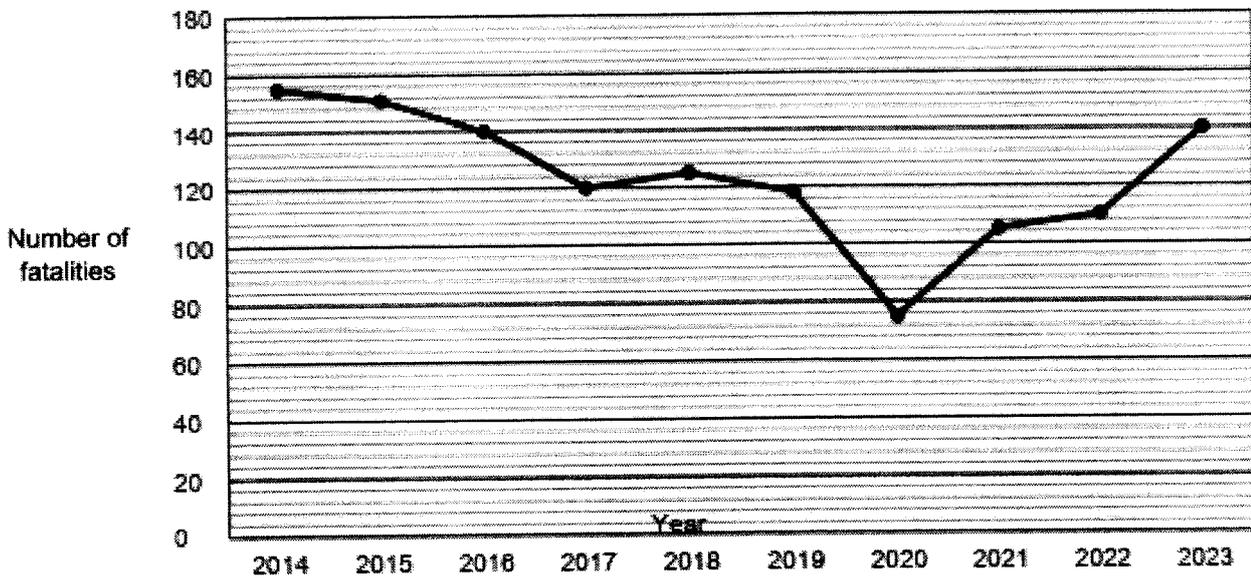


Fig. 1.3 for Question 1

Singapore government's plans to rejuvenate Pasir Ris Town under the Remaking Our Heartlands Programme

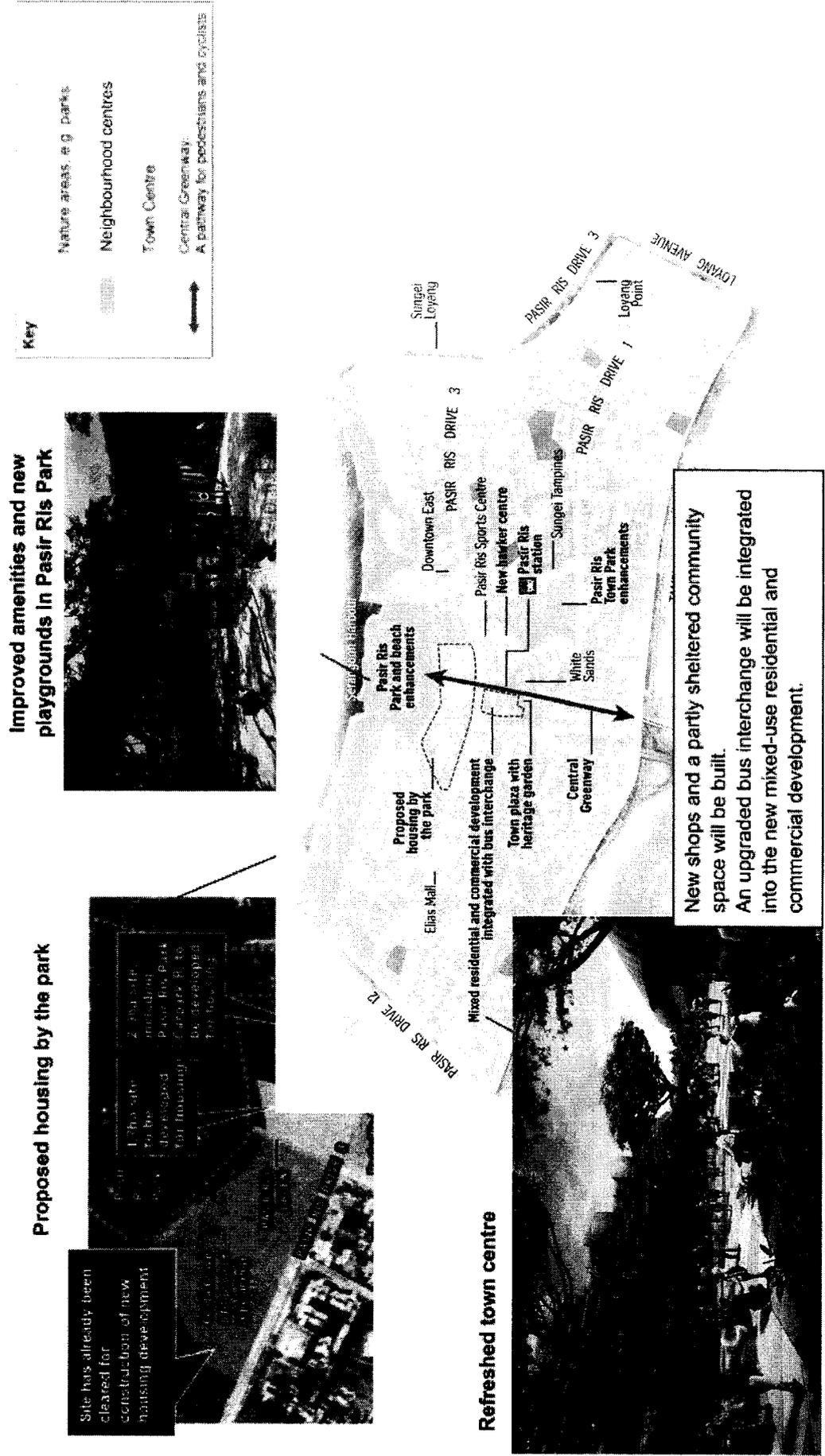


Fig. 2.1 for Question 2

Location of the San Andreas Fault

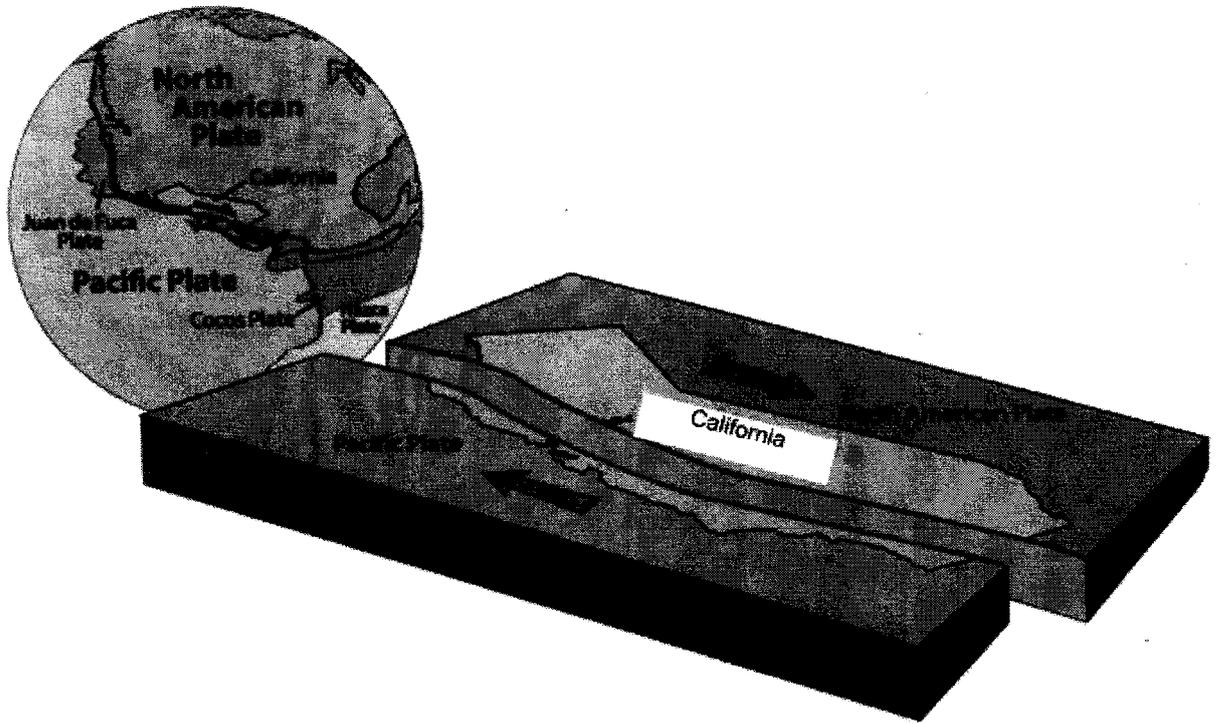


Fig. 2.2 for Question 2

Lava flow from the 2021 eruption of the Cumbre Vieja volcano on La Palma in the Canary Islands

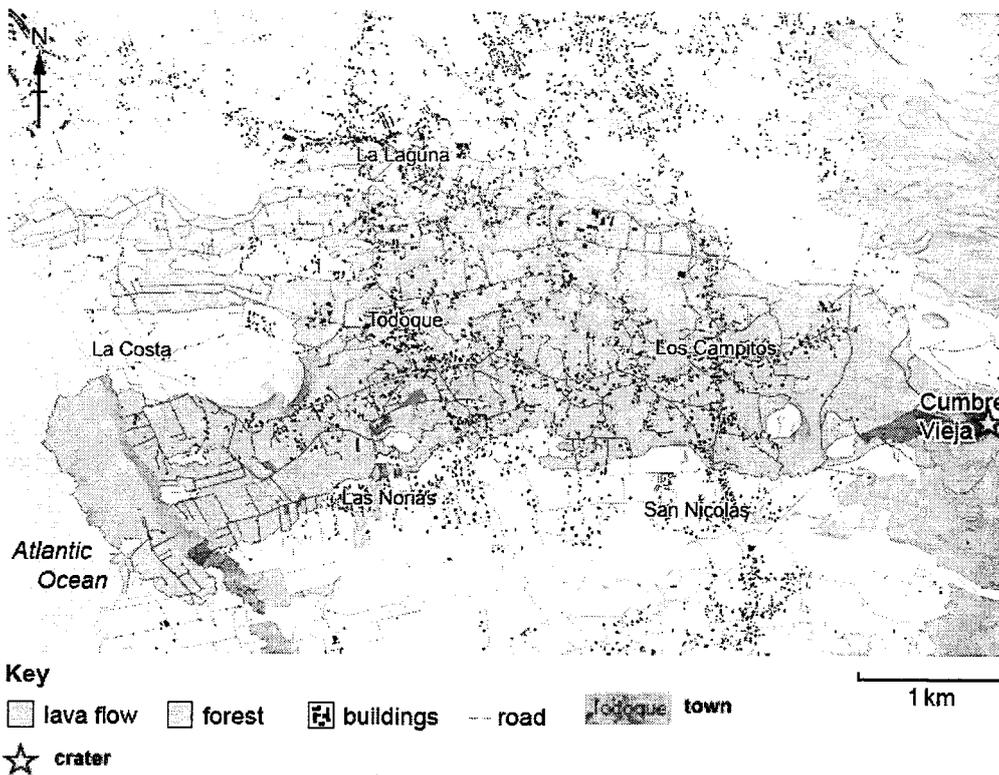


Fig. 3.1 for Question 3
Median age of marriage for women in Singapore and fertility rate from 1990 to 2024

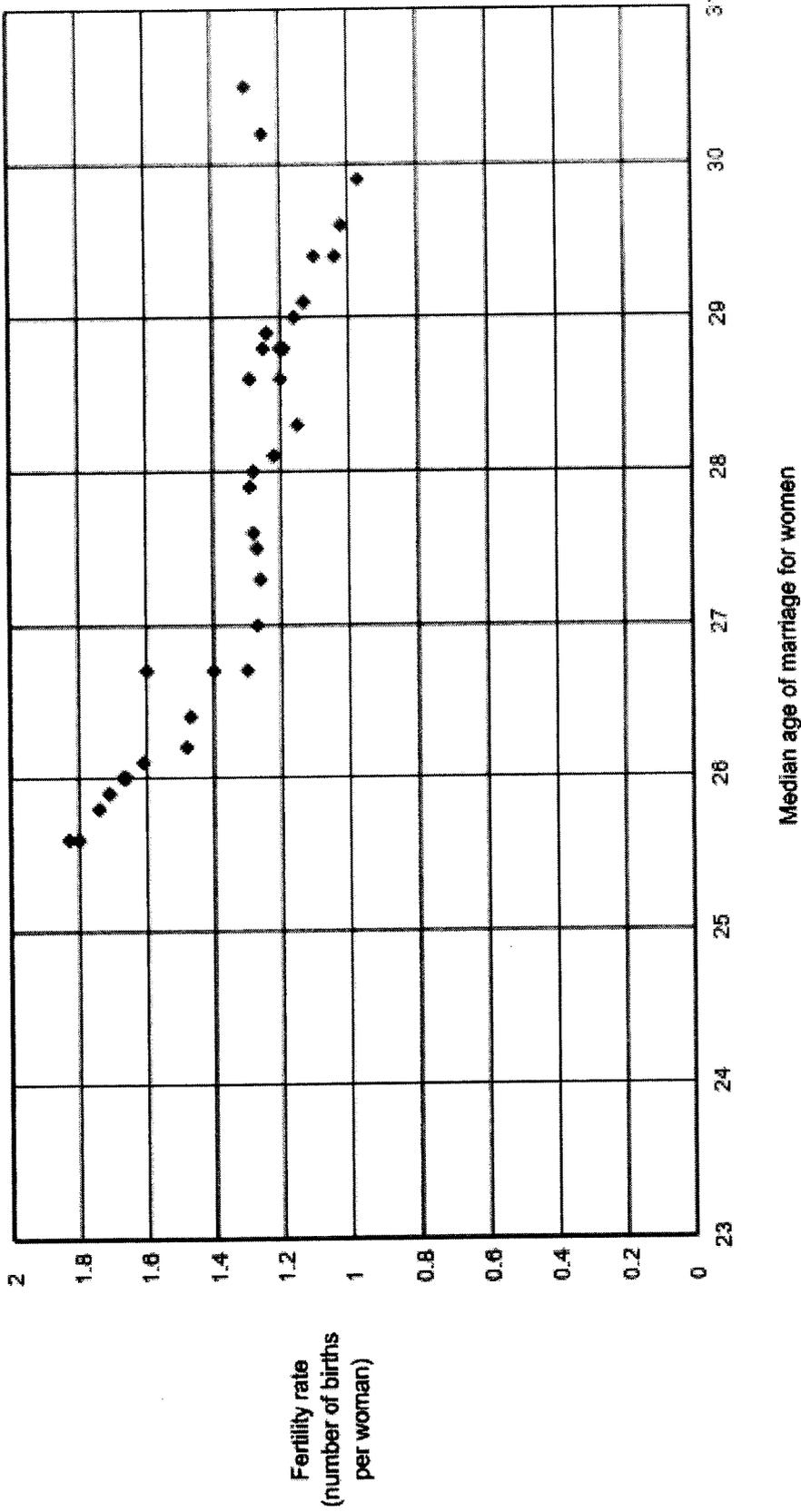


Fig. 3.2

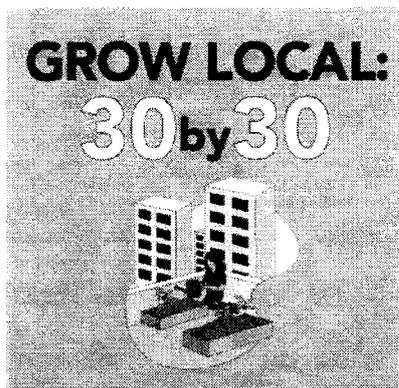
Strategies to strengthen Singapore's food security

Fig. 3.3A for Question 3

Dengue fever cases reported across Singapore in 2020

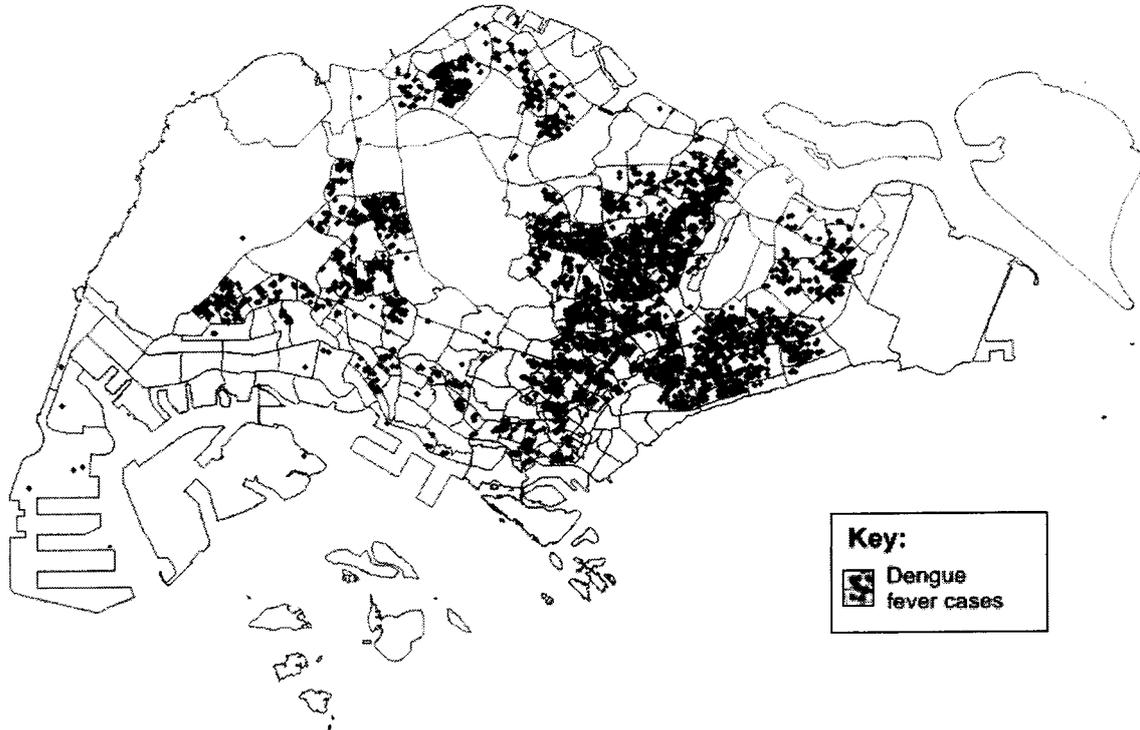


Fig. 3.3B for Question 3

Housing Development Board (HDB) Towns in Singapore



Fig. 3.4A for Question 3

Reclaimed areas and possible future reclamation areas in Singapore

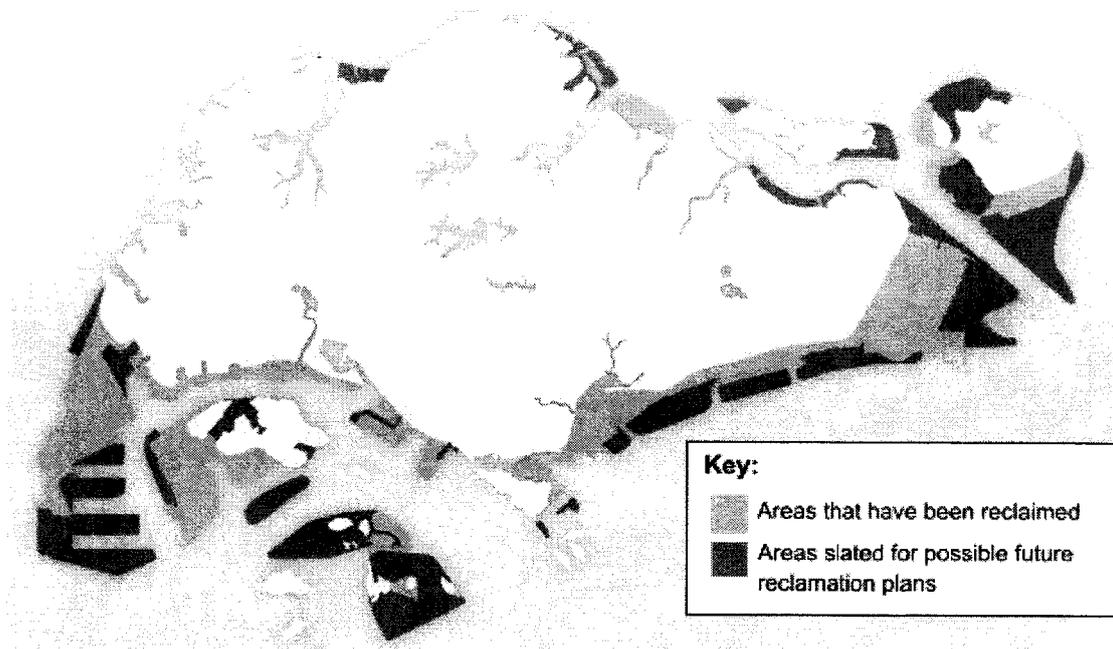


Fig. 3.4B for Question 3

Relief map of Singapore

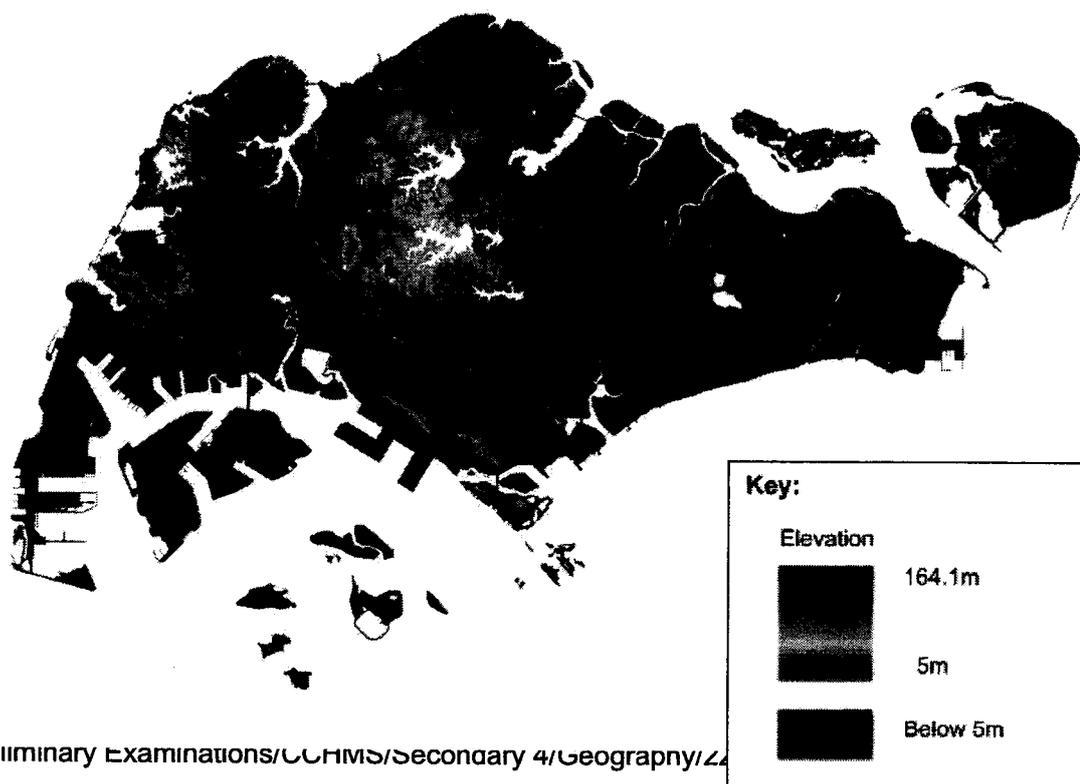


Fig. 3.5 for Question 3

Aerial view of the Marina Bay area

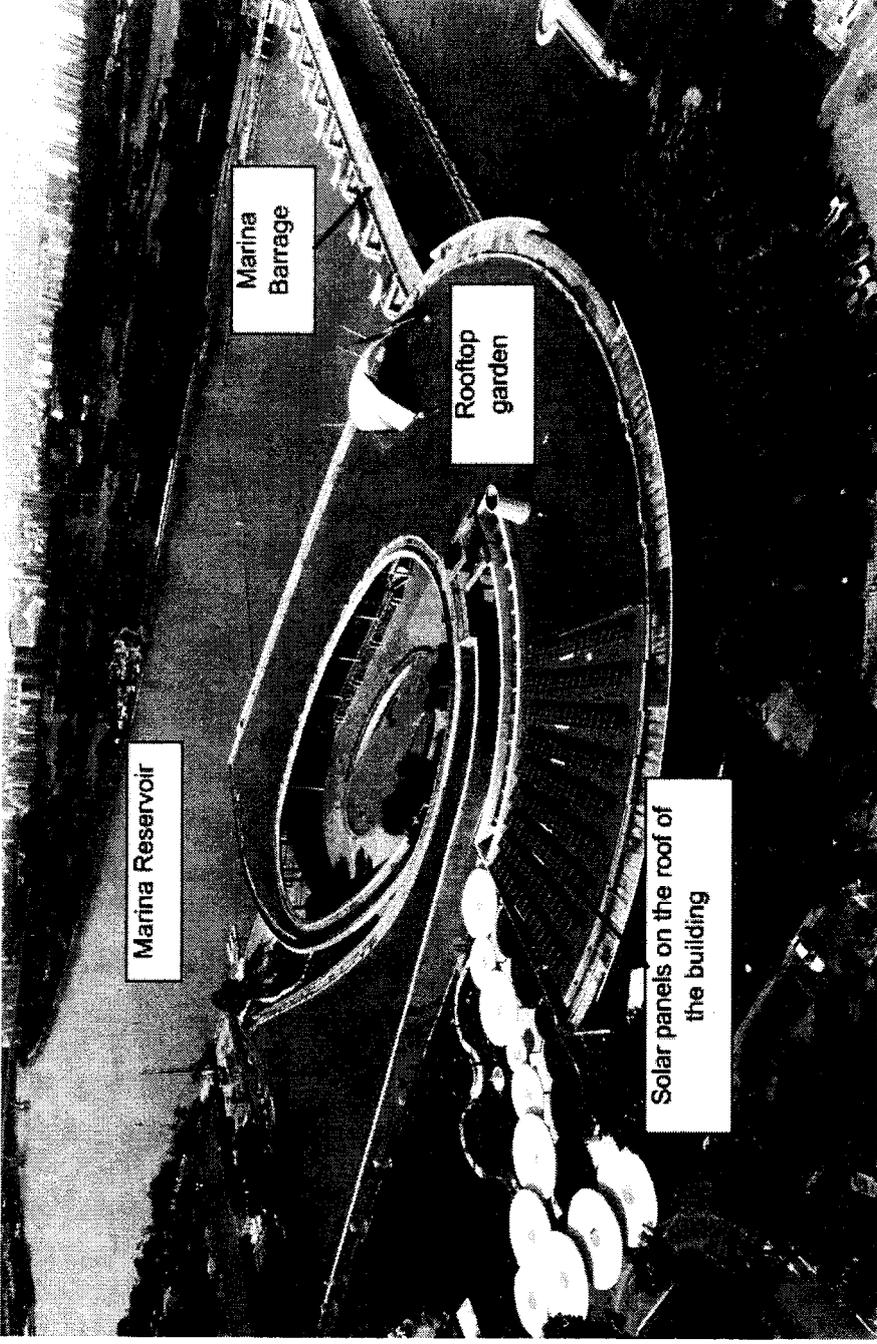
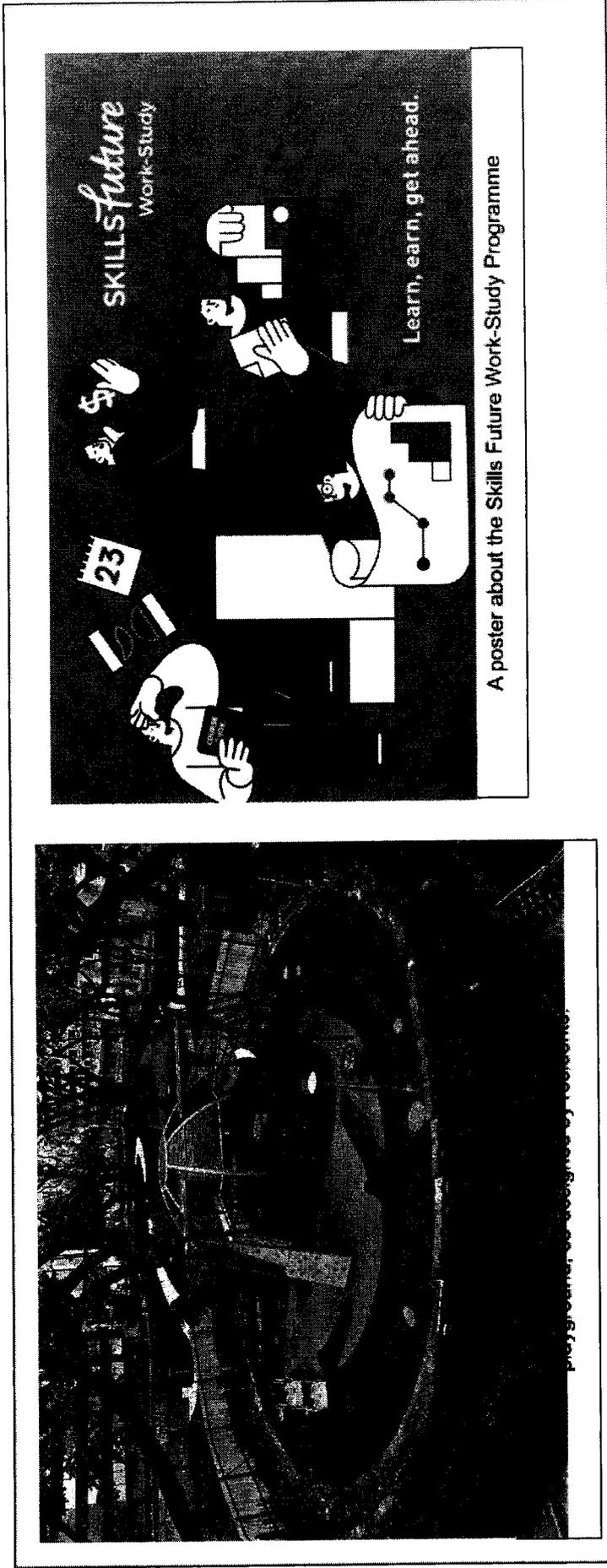


Fig. 3.6 for Question 3

Measures that Singapore has implemented to strengthen social resilience



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