

**GEOGRAPHY**

**9768/04**

Paper 4 Research Topic

**May/June 2014**

INSERT

**1 hour 30 minutes**

**READ THESE INSTRUCTIONS FIRST**

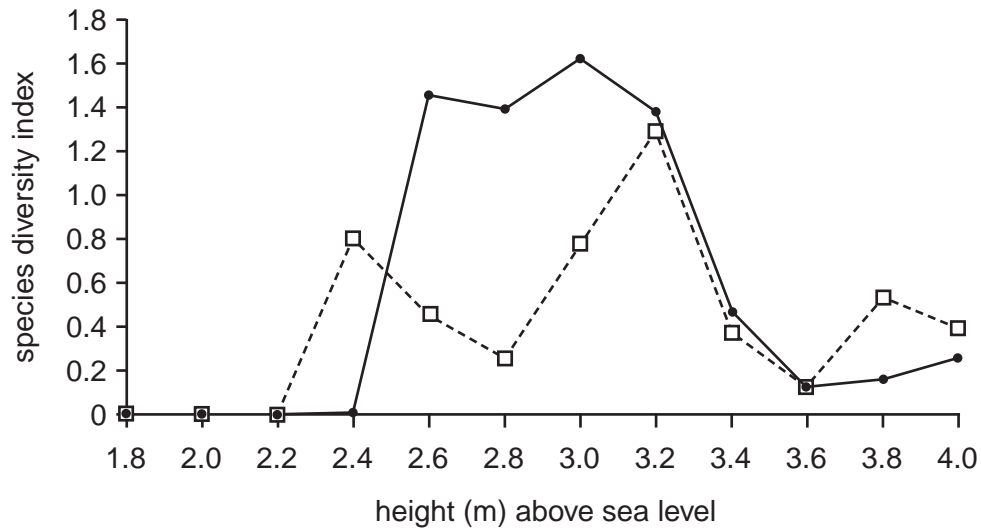
This Insert contains all the Figures and the Table referred to in the Question Paper.



This document consists of **11** printed pages and **1** blank page.

Fig. 1 for Question 1

The effect of trampling on salt marsh in the estuary of the River Gann, Milford Haven, Wales, over a 10 year period

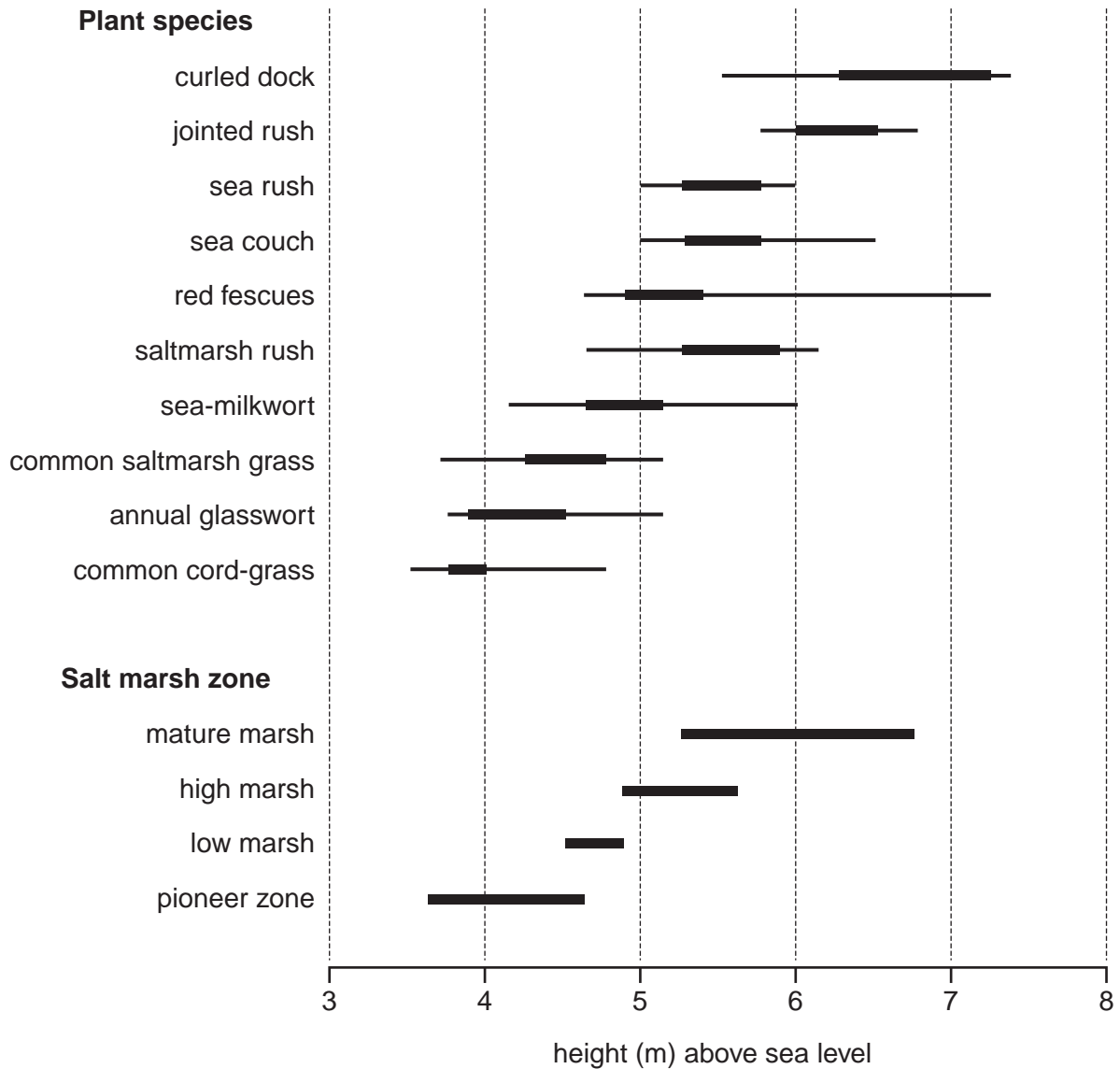
**Key**

- untrampled
- trampled

Species diversity index is a measure of the number of plant species present, a higher value indicating that a greater number of plant species are present.

Fig. 2 for Question 1

## Plant species in the salt marshes of Morecambe Bay, England

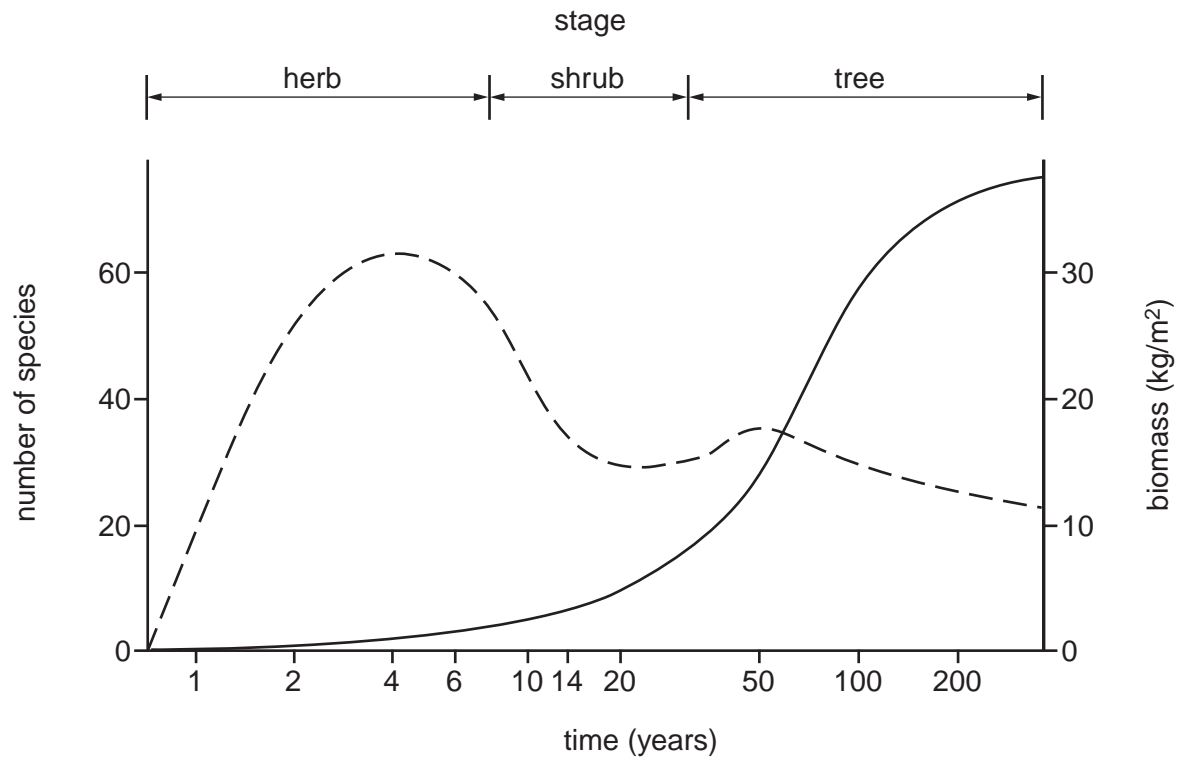


Note: the thicker parts of the line represent the range where a species is most frequent.



Fig. 3 for Question 2

The evolution of biomass and number of species of vegetation in a forested area over a period of time



**Key**



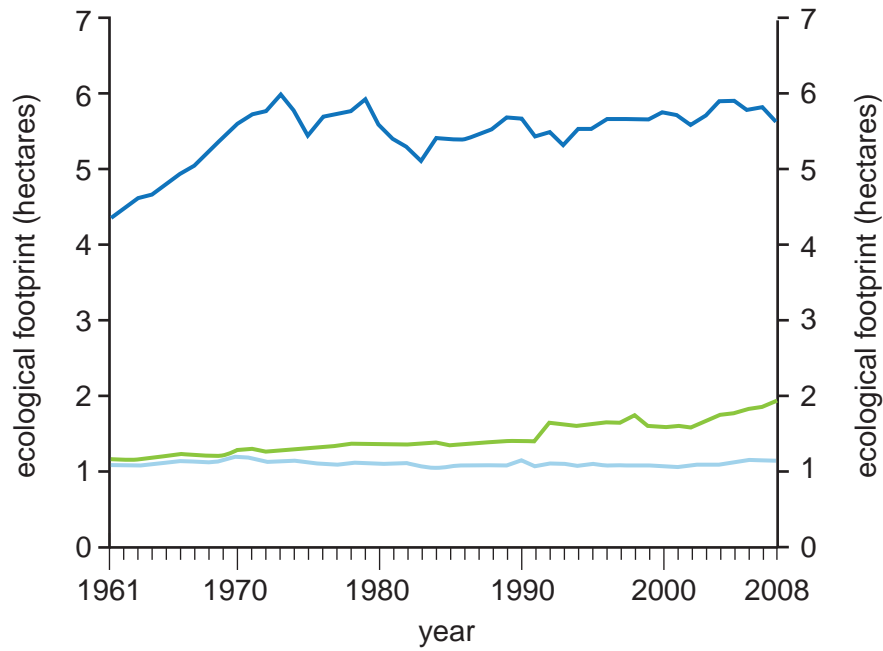
-  number of species
-  biomass

Fig. 4 for Question 5

The ecological footprint in low, middle and high income countries between 1961 and 2008



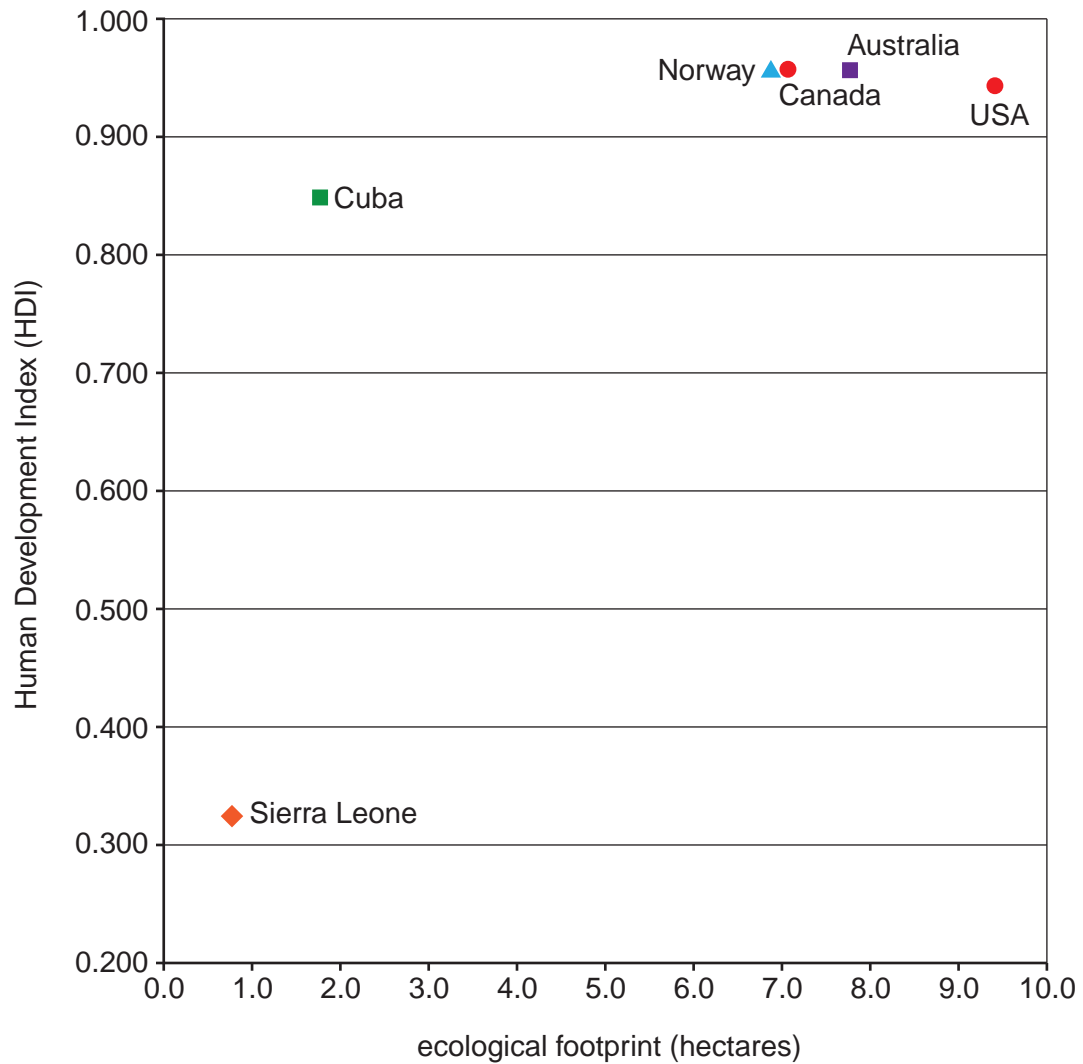
**Key**

- high income countries
- middle income countries
- low income countries

Ecological footprint can be defined as the area of land required by an individual in that country to maintain his or her standard of living.

Fig. 5 for Question 5

## Ecological footprint and Human Development Index (HDI) for selected countries



The HDI is a composite measure of development which takes into account life expectancy, education and income.

Table 1

## Annual population growth rate for selected countries

Country	Annual population growth rate (%)
Sierra Leone	2.3
Cuba	-0.15
Norway	0.33
Canada	0.78
Australia	1.13
USA	0.9

Fig. 6 for Question 6

## Population of dormice in England, 1993 to 2000

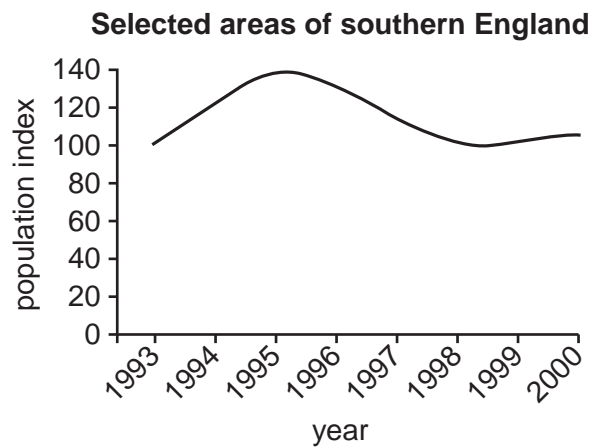
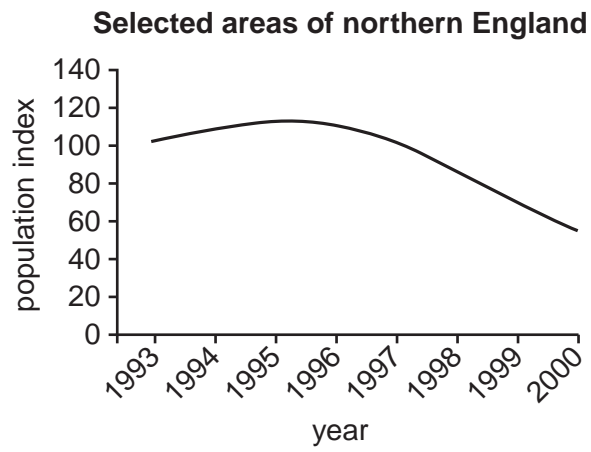
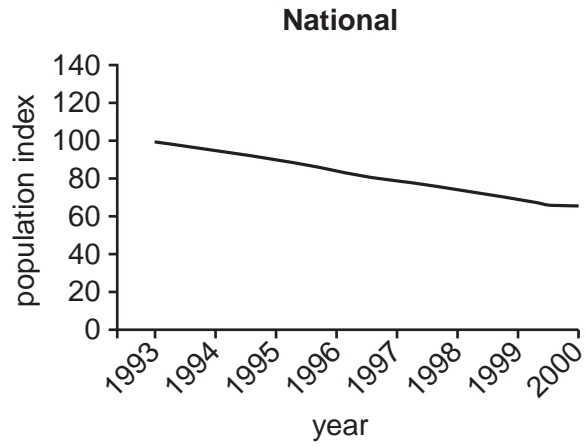




Fig. 7 for Question 9

## Changing areas of selected land uses in the CBD of Bangalore, India, 1985 to 2003

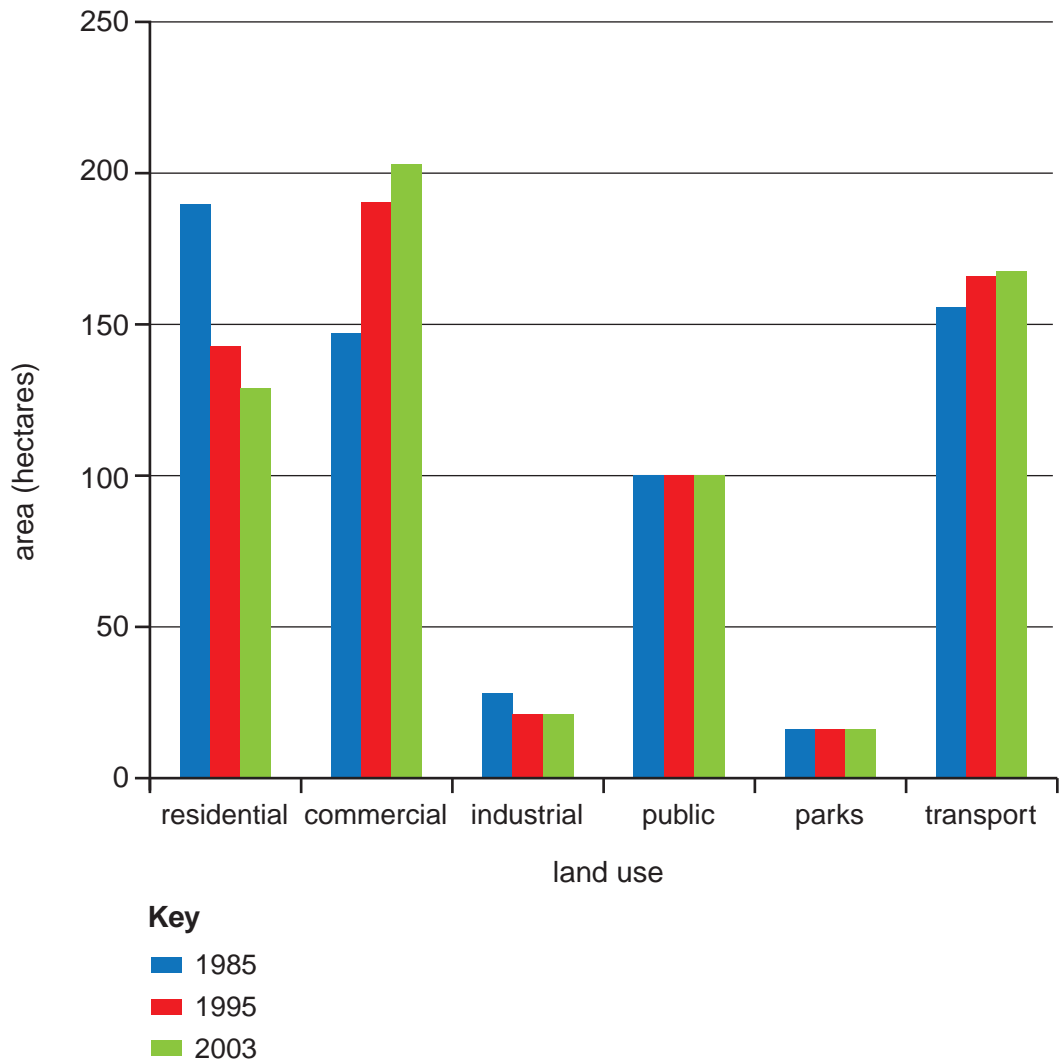
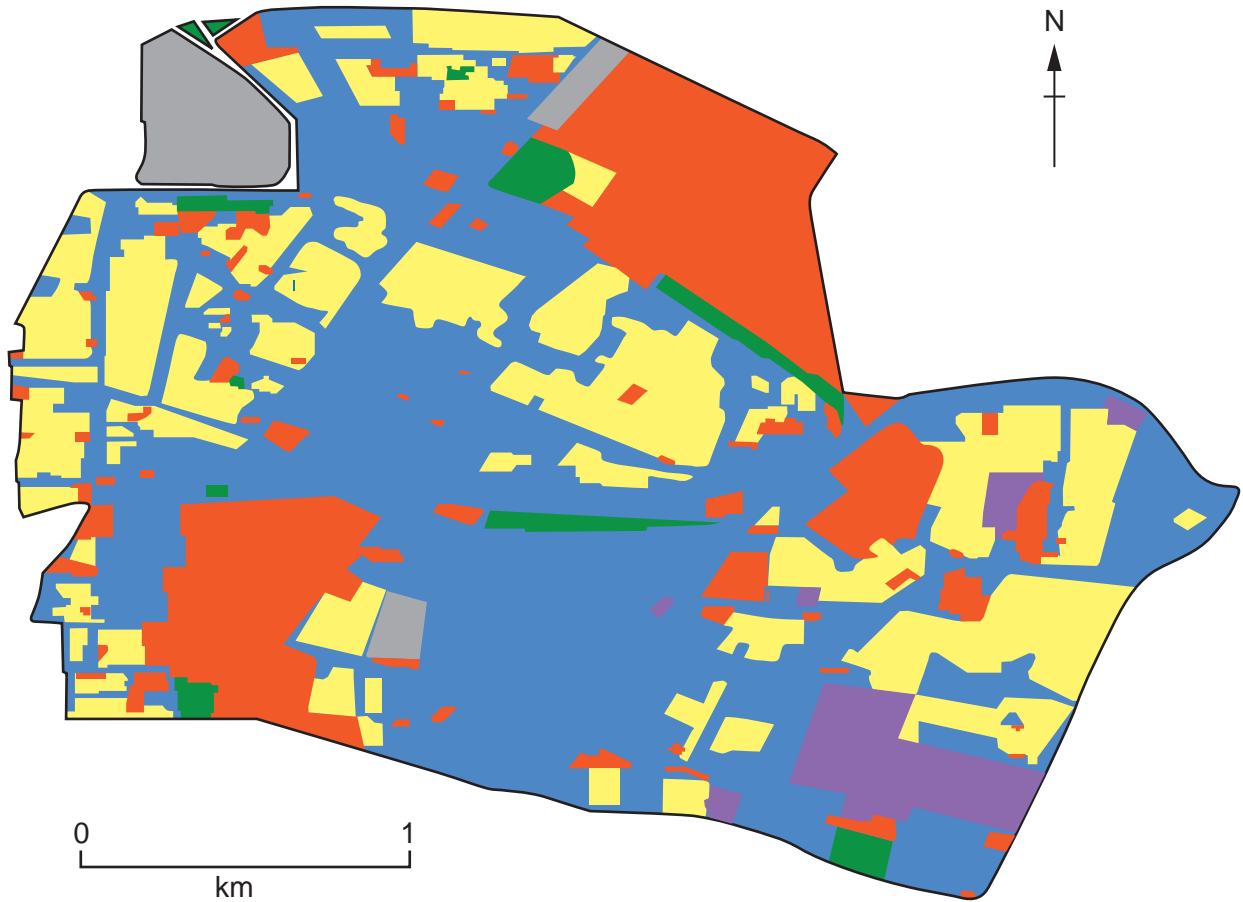


Fig. 8 for Question 9

Land use in the CBD of Bangalore, India, 2003



**Key**

- residential
- commercial
- public
- park
- industrial
- transportation

Fig. 9 for Question 9

The CBD of Bangalore, India

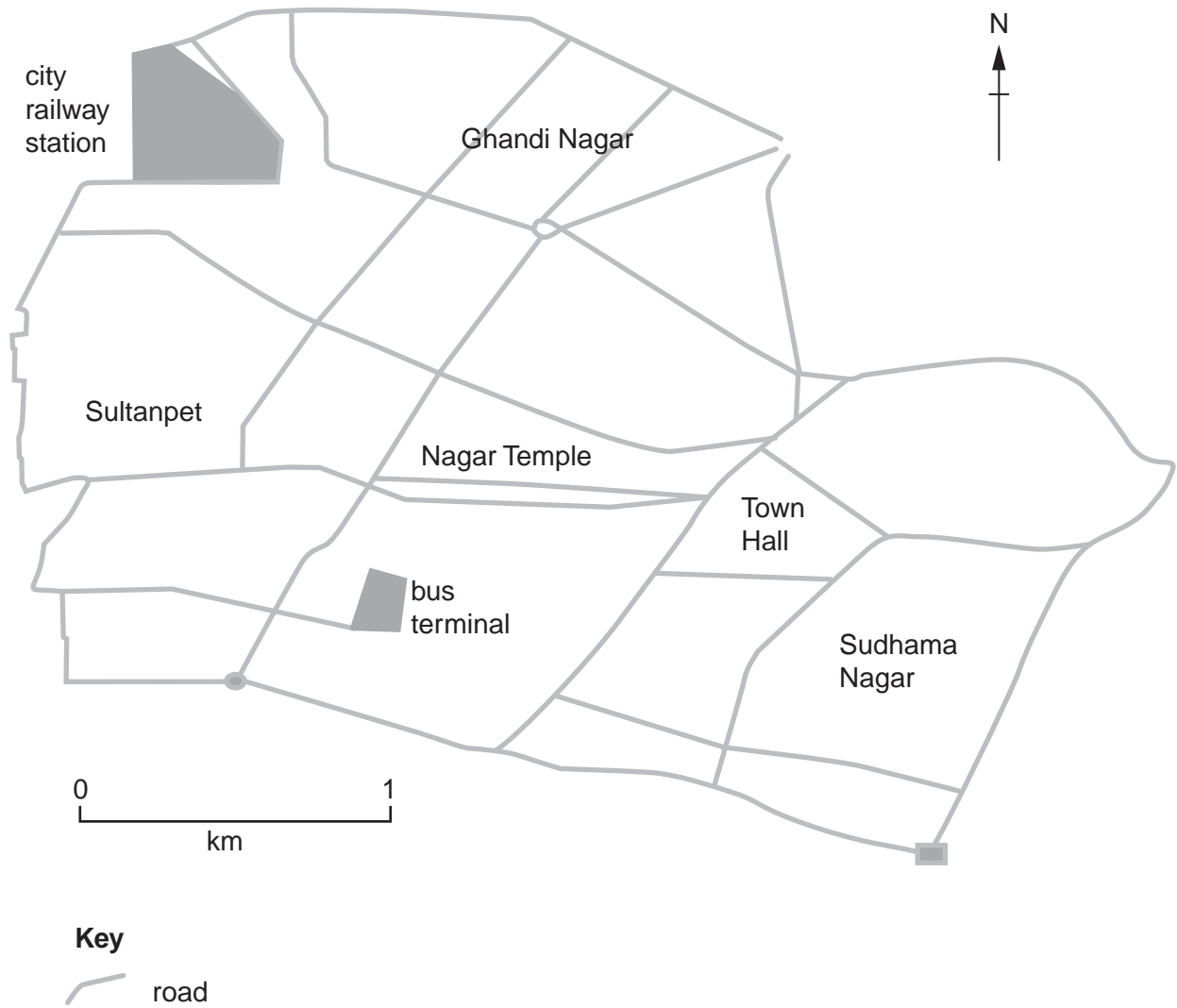
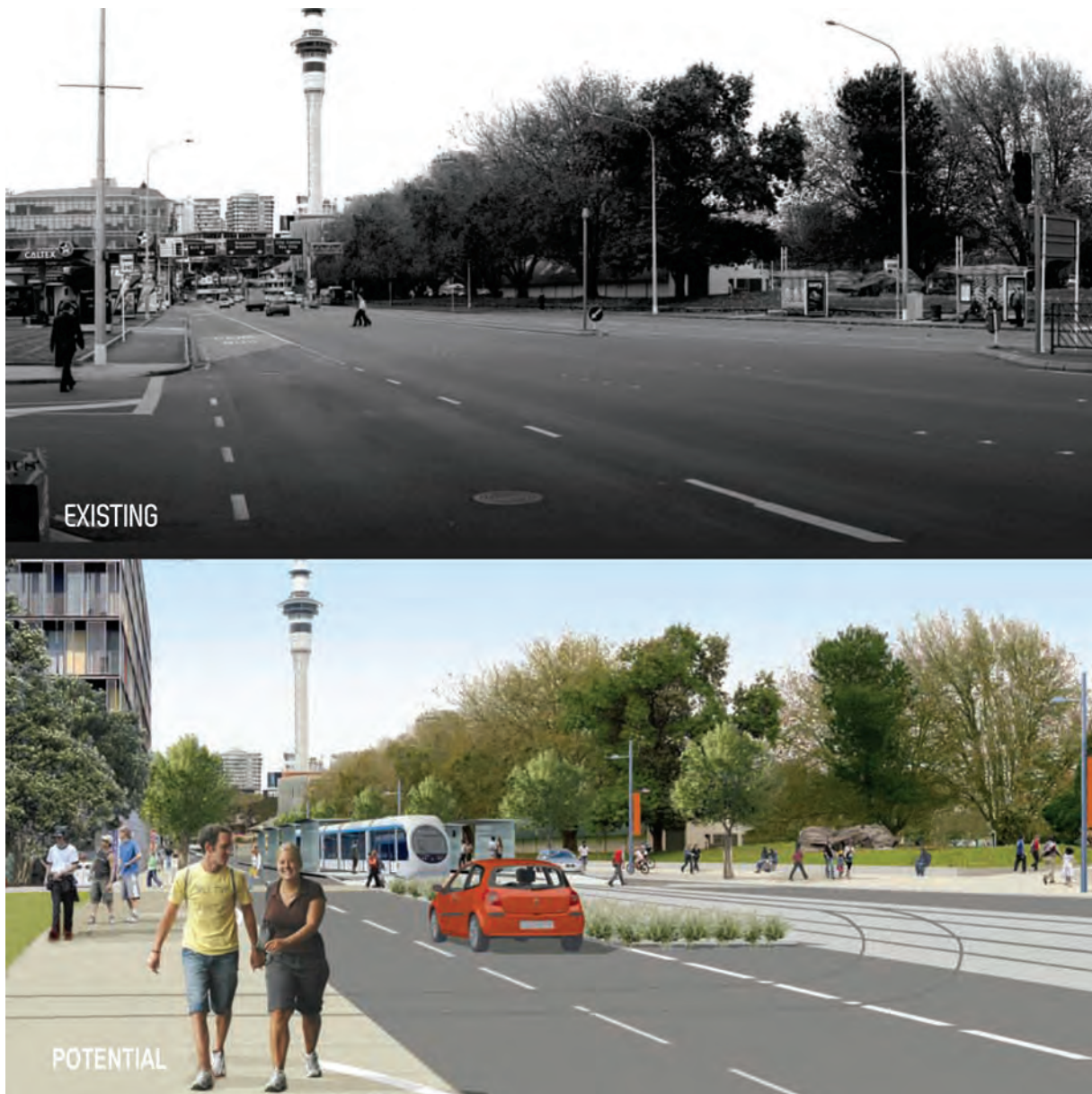


Fig. 10 for Question 10

## Proposed changes to Quay Street in the CBD of Auckland, New Zealand



## Copyright Acknowledgements:

- Question 1 Fig. 1 © Headley & Sale; *The Impact of Trampling By Student Groups on Saltmarsh Vegetation*; *Field Studies*; p. 521; 1999; [http://fsj.field-studies-council.org/media/345035/vol9.3\\_254.pdf](http://fsj.field-studies-council.org/media/345035/vol9.3_254.pdf)
- Question 1 Fig. 2 © *Saltmarsh Management Manual*; Environment Agency; 2007; ISBN 97818/4432714.
- Question 2 Fig. 3 © G O'Hare; *Soils, Vegetation, Ecosystems*; Oliver & Boyd; 1992; ISBN 0050042378.
- Question 5 Fig. 4 © [http://awsassets.panda.org/downloads/1\\_lpr\\_2012\\_online\\_full\\_size\\_single\\_pages\\_final\\_120516.pdf](http://awsassets.panda.org/downloads/1_lpr_2012_online_full_size_single_pages_final_120516.pdf)
- Question 6 Fig. 6 © *The Dormouse Conservation Handbook*; English Nature; <http://publications.naturalengland.org.uk/publication/80018>
- Question 9 Figs 7, 8 & 9 © Mohammad Reza, Dr. Krishna Murthy Javaid Ahmad Tali, Dr. H. N. Nagendra; *Future Threats to CBD: A Case Study of Bangalore CBD*; Department of Studies in Geography and Institute of Development Studies; University of Mysore.
- Question 10 Fig. 10 © <http://www.aucklandcouncil.govt.nz/en/planspoliciesprojects/plansstrategies/ccmp/Pages/home.aspx>

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.