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## Scholarship 2019 Geography

2.00 p.m. Friday 22 November 2019

### RESOURCE BOOKLET

Refer to this booklet to answer the questions for Scholarship Geography.

Check that this booklet has pages 2–21 in the correct order and that none of these pages is blank.

**YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.**

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# **THE SIGNIFICANCE OF GEOGRAPHIC LOCATION IN A GLOBAL CONTEXT**

## **INTRODUCTION: THE PREMISE OF GEOGRAPHY**

Nothing can be adequately understood if separated from the place where it occurs. That is, no event, situation, or problem in human society has much meaning until it is examined against the characteristics of that part of the Earth that constitutes the background for it. For instance, if the first civilisations had arisen in Scandinavia instead of Mesopotamia, or if the Industrial Revolution had first occurred in Spain rather than in Britain, the meaning of these examples of behaviour in human society would have been vastly different, even if the events themselves remained the same. This connection between human affairs and the geographic location where they occur is the essence of Geography.

Geographic location controls the formation of natural environments. These natural environments affect large groups of people very directly and in a primary manner. Every community, tribe, state, and nation on Earth is affected by the natural environment directly, vigorously, and persistently. No major activity of human society is independent of its helps, hindrances, or directives. The National Geographic Society states the “natural environment does to human society what the social environment does to the human individual”.

## SECTION A: NATURAL GEOGRAPHY

### GLOBAL TERRESTRIAL BIOMES

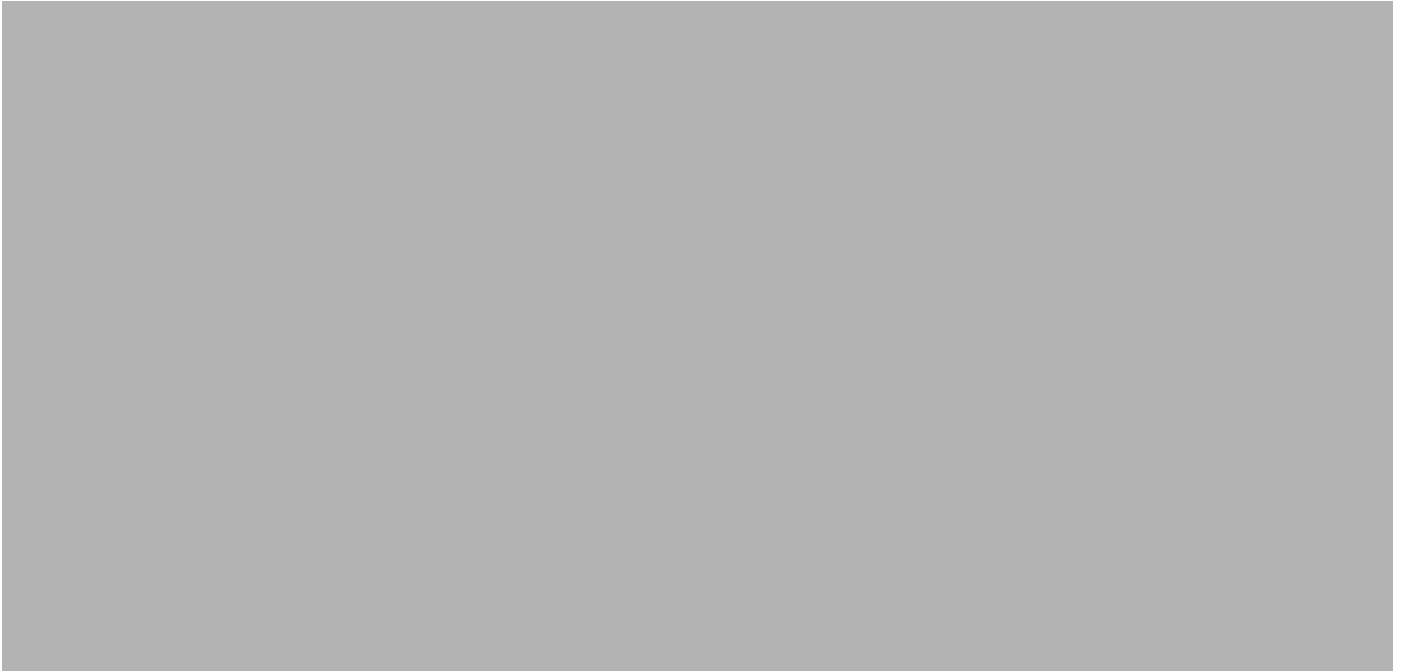


**Figure 1:** The 14 global terrestrial biomes



**Figure 2:** Relationship between precipitation, temperature, and terrestrial biomes

## LATITUDES AND ELEVATION IMPACTING CLIMATE



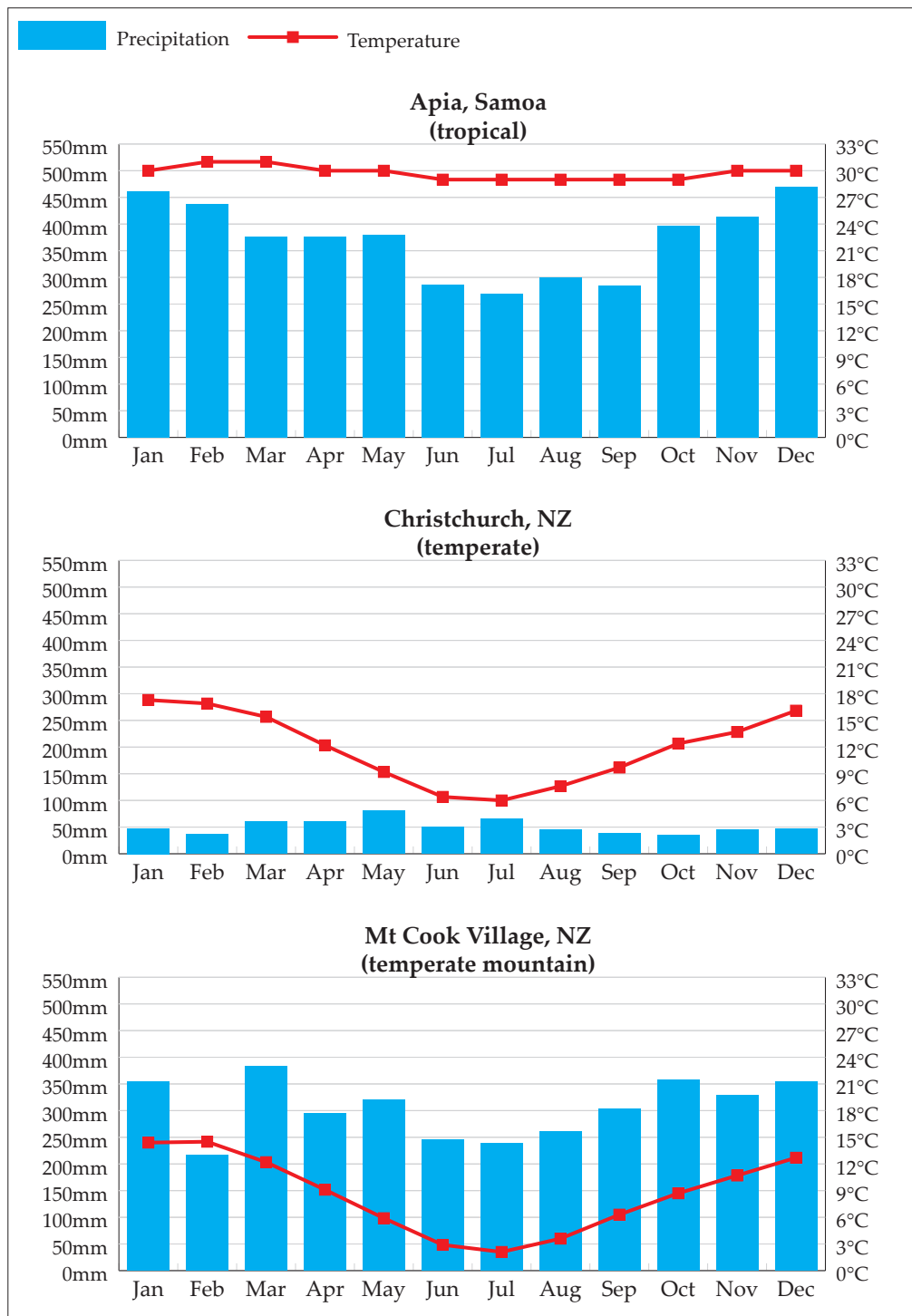
**Figure 3:** World elevation map highlighting areas varying altitude

Latitude is a measure of distance

Latitude is a measure of distance from the equator to a point on the Earth's surface. It is measured in degrees, ranging from 0° at the equator to 90° at the poles. Latitude lines are parallel to the equator and are used to determine the location of a point on the Earth's surface.

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leeward side of a mountain range or continental mass.



**Figure 4:** Three contrasting climate graphs of a tropical, temperate, and temperate mountain location

## CONSTANT FLUCTUATIONS IN CLIMATE

### Shifting climate zones

The word “tropical” often brings to mind




**Figure 5:** Movement of the edge of the tropics


trigger the collapse of the Ottoman Empire.



**Figure 6:** The world's largest warm-weather desert is getting bigger. The Sahara already covers a vast 5.7 million km<sup>2</sup>. Since 1902 the Sahara desert has grown 10%, advancing as much as 800 km.



**Figure 7:** Hotspots for tornado formation in the US have shifted east 800 km since the mid-1980's with shifts in temperature.



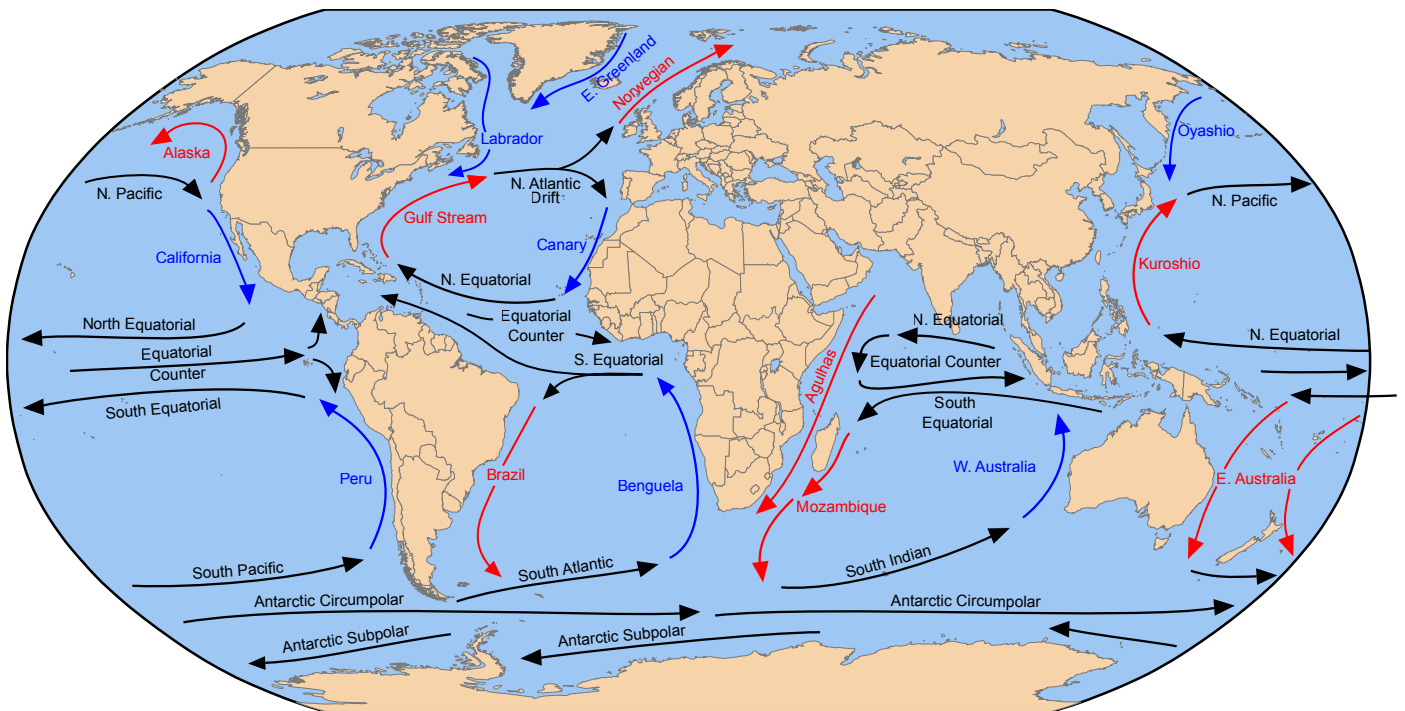
**Figure 8:** Between 1990 and 2015, production in Australia's wheat belt dropped 50% due to drier conditions.



**Figure 9:** Canada's permafrost is retreating north, moving as far as 128 km poleward in the last 50 years. Permafrost landscapes retain a high potential for climate-driven transformation. Mapping across 1.27 million km<sup>2</sup> of northwestern Canada points to large thaw-induced slope disturbances. Recent intensification of this thaw slumping has mobilised glacial sediments, triggering a cascade of fluvial and coastal effects.



## Ocean currents



**Figure 10:** Illustration of major ocean currents throughout the globe. Ocean currents act as conveyor belts of warm and cold water, sending heat toward the polar regions and helping tropical areas cool off.

The world's ocean is crucial to

less of Earth's land would be habitable.

## NATURAL HAZARDS



**Figure 11:** The location of plates shapes the Earth and leads to natural hazards



**Figure 12:** Highlighting atmospheric natural hazards

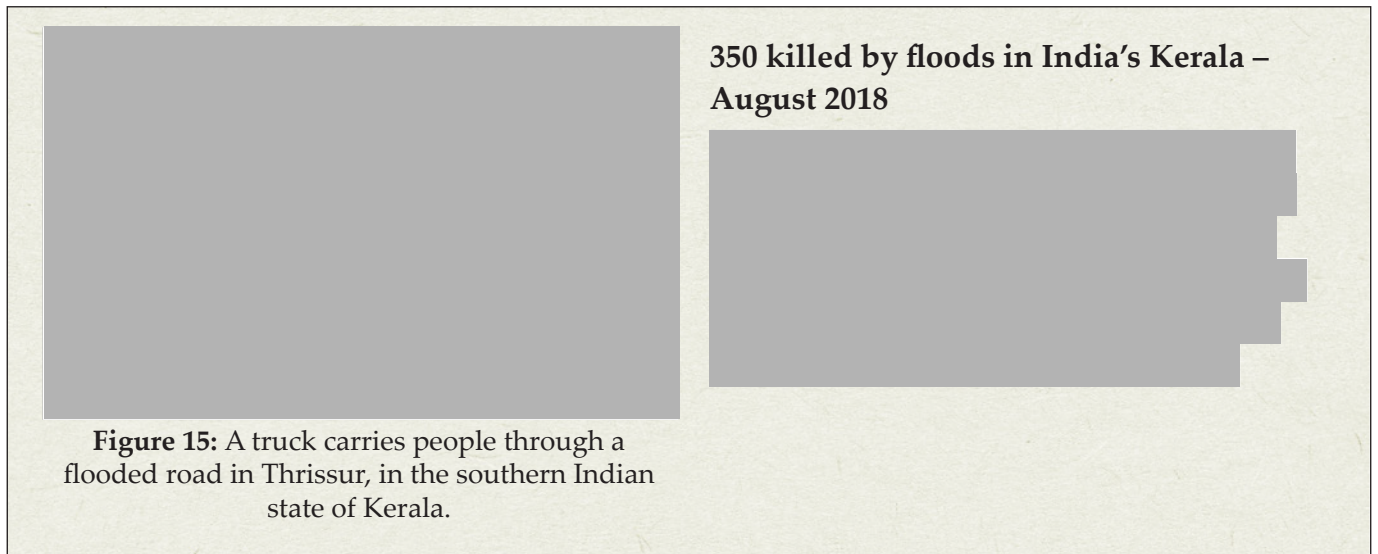


**Figure 13:** Map estimating the levels of exposure of the different countries to natural hazards



**Figure 14:** Indonesian disasters

Some geographic locations are more prone to natural disaster. In March 2018, an Indonesian volcano in the Sulawesi region erupted shortly after the island was shaken by a fatal earthquake and tsunami.



**Figure 15:** A truck carries people through a flooded road in Thrissur, in the southern Indian state of Kerala.

**350 killed by floods in India's Kerala – August 2018**



**Figure 16:** The world map shows the areas affected by large flood events occurring between 2001 and June 2016. Areas with multiple overlapping events are in darker blue.

## 2018 California wildfires

The 2018 wildfire season in California



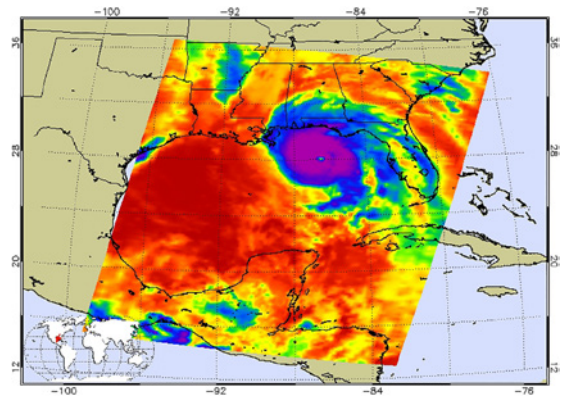
**Figure 17:** Satellite image of California wildfires

in fire suppression costs.

## 2018 Storms

Hurricane Michael ploughed into the Gulf of Mexico on 10 October 2018, as a major Category 4 storm – the strongest hurricane ever to hit that region.

Simultaneously, the world's largest 2018 storm, Typhoon Mangkhut, slammed into the Philippines.



**Figure 18:** Hurricane Michael

**Figure 19:** Track of Typhoon Mangkhut

**Figure 20:** Typhoon damage

## SECTION B: CULTURAL GEOGRAPHY

### MIGRATION



**Figure 21:** Global migration major transport routes

#### Forced displacement

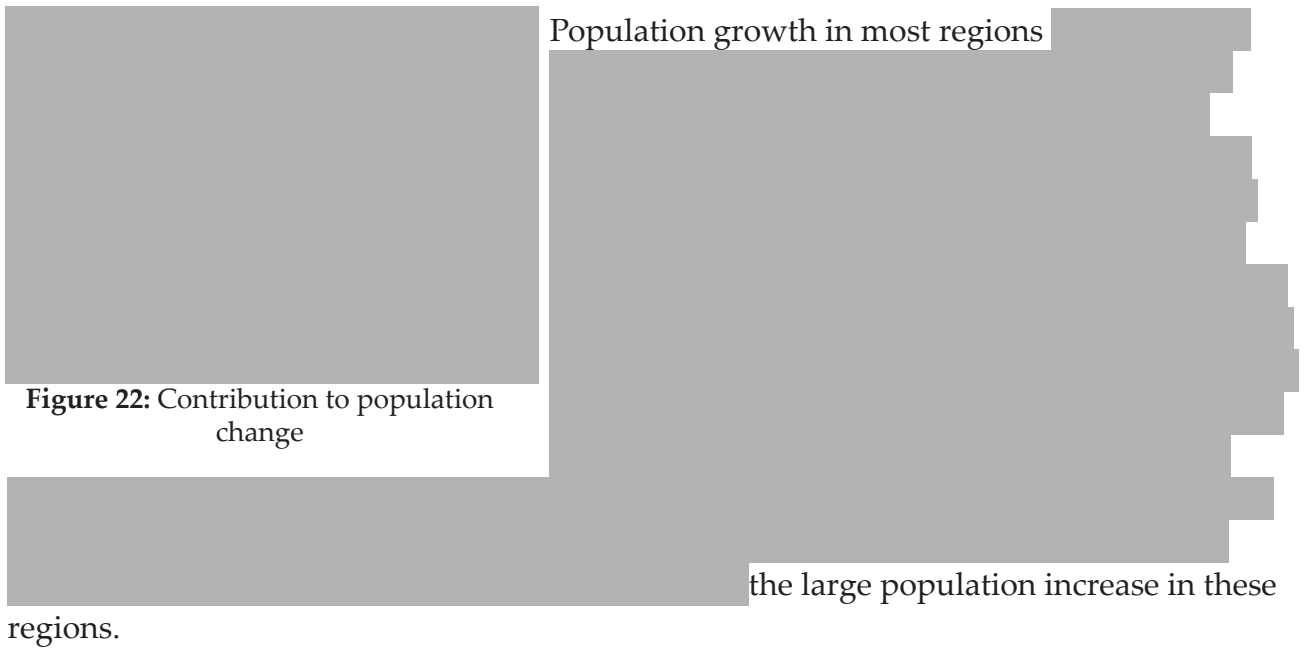
Levels of global forced displacement



safer travelling in numbers.

say they feel

### Migration drives local population growth in NZ



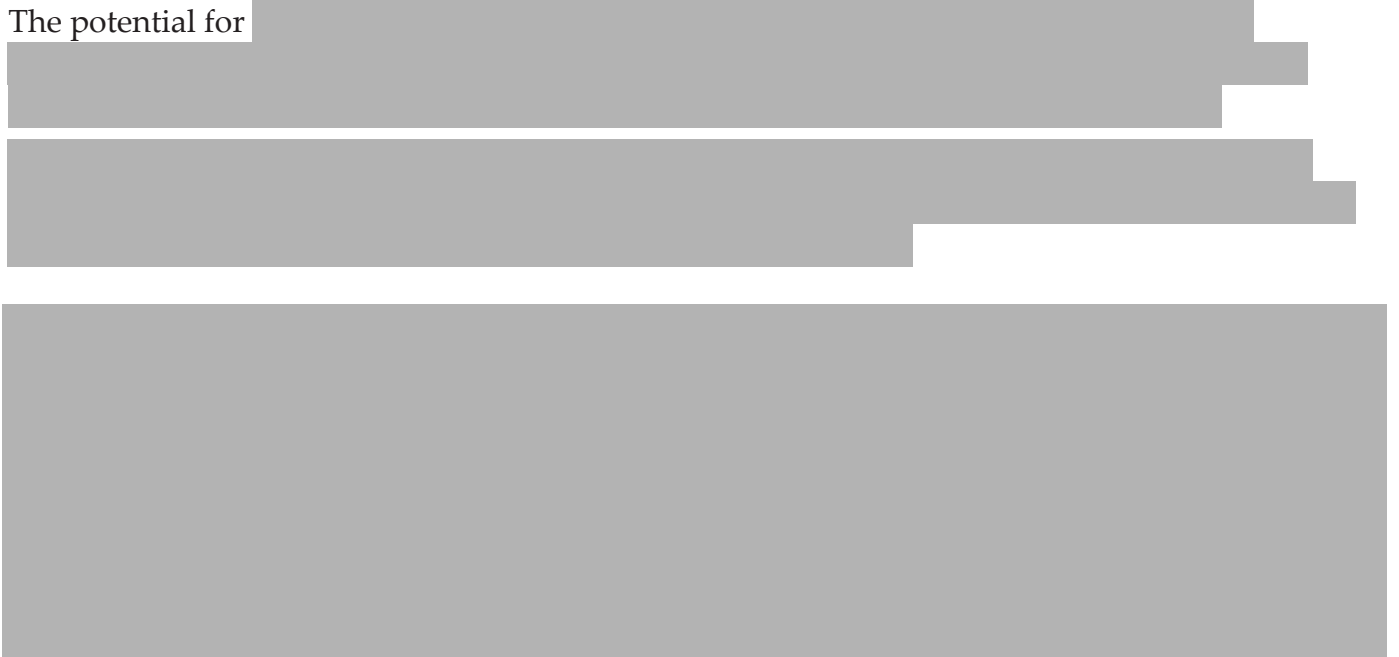
### Human trafficking



**Figure 23:** Countries of origin and destination for human trafficking

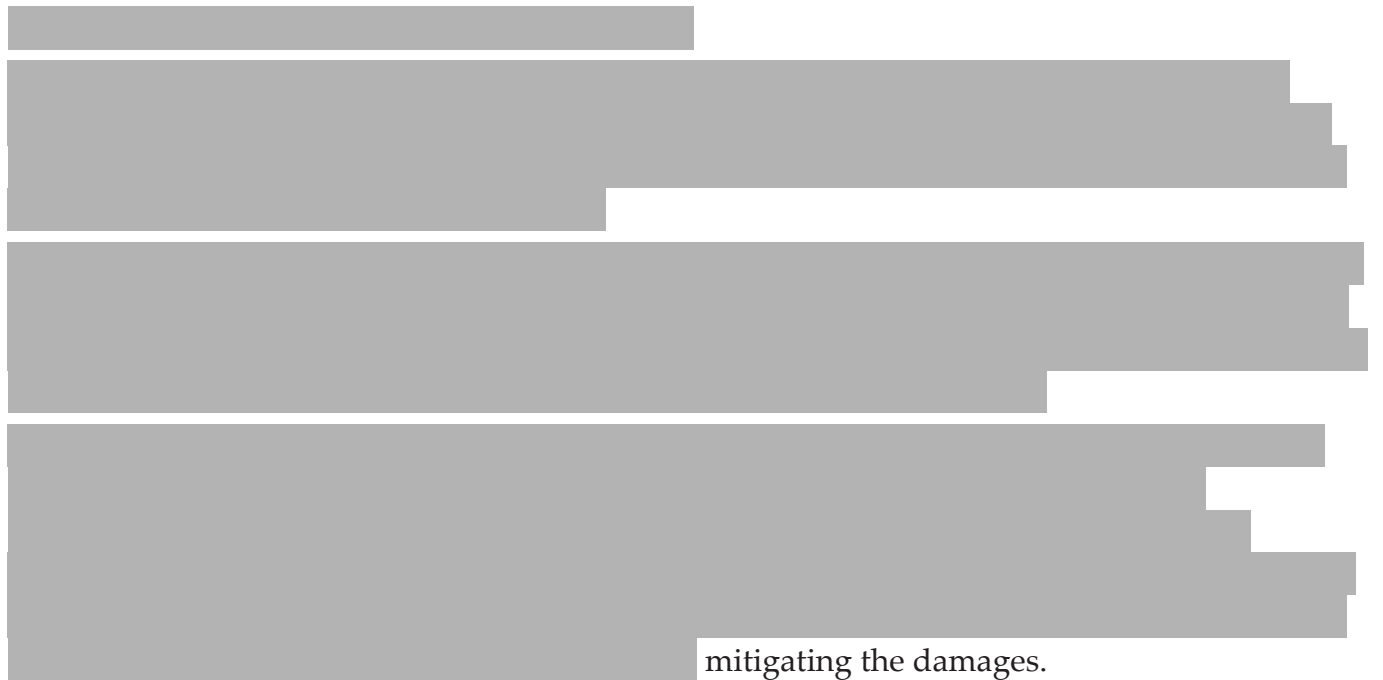
**INEQUALITY****Climate change**

The potential for



**Figure 24:** Carbon emissions 2015

**Figure 25:** GDP wealth 2018



mitigating the damages.

## Poverty

### Figure 26: Where extreme poverty persists

Food security can be

more easily spread.

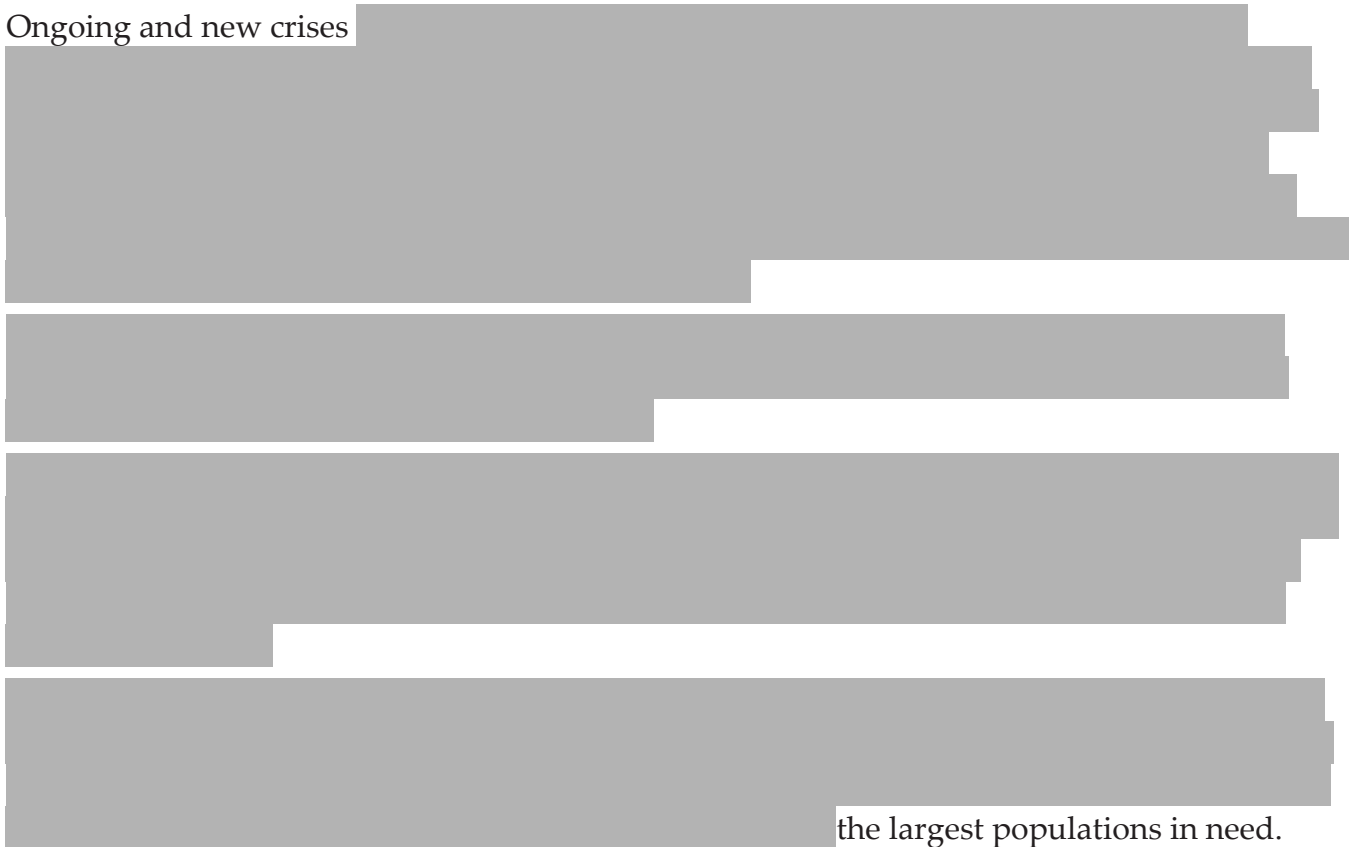


## Humanitarian assistance



**Figure 27:** US foreign aid

Ongoing and new crises



the largest populations in need.

**TRADE****Economic links**

**Figure 28:** Top container ship routes

China has been working

[REDACTED]

[REDACTED]

[REDACTED]

will not threaten the status quo.

## Territorial disputes

### Figure 29: South China Sea claims

## The South China Sea disputes

important shipping lanes.

## Political change: Brexit



**Figure 30:** European Union membership

Brexit, a portmanteau of

[REDACTED]

[REDACTED]

[REDACTED] academic research.

## Acknowledgements

Material from the following sources has been adapted for use in this examination:

### Page 4

Figure 1: [https://commons.wikimedia.org/wiki/File:Biomes\\_of\\_the\\_world.svg](https://commons.wikimedia.org/wiki/File:Biomes_of_the_world.svg)

Figure 2: <http://anamelissa-scienceclass.blogspot.com/2010/11/summary6-world-biomes.html>

### Page 5

Figure 3: <https://academic.oup.com/view-large/figure/28106739/jtm12017-fig-0001-m.jpeg>

Text: <https://sciencing.com/effect-geography-climate-9860.html>

### Page 6

Figure 4 data from:

<http://hikersbay.com/climate-conditions/samoa/apia/climate-conditions-in-apia.html?lang=en>

<http://cdnisclimategraphs.blogspot.com/2010/03/christchurch-new-zealand.html>

<https://en.climate-data.org/oceania/new-zealand/canterbury/mount-cook-village-204158/>

### Page 7

Text & Figure 5: <https://e360.yale.edu/features/redrawing-the-map-how-the-worlds-climate-zones-are-shifting>

### Page 8

Figures 6 & 8: <https://e360.yale.edu/features/redrawing-the-map-how-the-worlds-climate-zones-are-shifting>

Figure 7: [https://en.wikipedia.org/wiki/Tornado\\_Alley#/media/File:Tornado\\_Alley\\_Diagram.svg](https://en.wikipedia.org/wiki/Tornado_Alley#/media/File:Tornado_Alley_Diagram.svg)

Figure 9: <https://phys.org/news/2017-02-climate-driven-permafrost.html>

### Page 9

Figure 10: <https://commons.wikimedia.org/wiki/File:Corrientes-oceanicas-en.svg>. Public domain image.

Text: <https://oceanexplorer.noaa.gov/facts/climate.html>

### Page 10

Figure 11: <https://serc.carleton.edu/details/images/181641.html>

Figure 12: <https://www.munichre.com/touch/naturalhazards/en/publications/world-map-natural-hazards/index.html>

Figure 13: <https://journals.openedition.org/cybergeogeo/25297?lang=en>

### Page 11

Figure 14: <https://www.straitstimes.com/asia/se-asia/indonesia-rocked-by-volcanic-eruption-after-devastating-sulawesi-quake>

Figure 15: <https://www.stuff.co.nz/world/asia/106395742/350-killed-by-floods-in-indias-kerala>

Figure 16: <https://www.caliper.com/featured-maps/maptitude-flood-events-map.html>

### Page 12

Figure 17: "2018 Nov 9 California Wildfires via TERRA" by NASA ([https://commons.wikimedia.org/wiki/File:2018\\_Nov\\_9\\_California\\_Wildfires\\_via\\_TERRA.jpg](https://commons.wikimedia.org/wiki/File:2018_Nov_9_California_Wildfires_via_TERRA.jpg)). Public domain image.

Text: [https://en.wikipedia.org/wiki/2018\\_California\\_wildfires](https://en.wikipedia.org/wiki/2018_California_wildfires)

Figure 18: "NASA's AIRS captures Hurricane Michael off Florida coast" by NASA / JPL-Caltech (<https://www.nasa.gov/feature/jpl/all-eyes-on-hurricane-michael>). Public domain image.

Figure 19: <https://www.rappler.com/nation/special-coverage/weather-alert/211701-typhoon-mangkhut-pagasa-forecast-september-11-2018-11am>

Figure 20: <https://www.standard.co.uk/news/world/typhoon-mangkhut-deaths-at-least-12-killed-in-terrifying-storm-in-the-philippines-a3936776.html>

### Page 13

Figure 21 and text: <https://news.nationalgeographic.com/2015/09/150919-data-points-refugees-migrants-maps-human-migrations-syria-world/>

### Page 14

Figure 22 and text: <https://www.stats.govt.nz/news/migration-drives-local-population-growth>

Figure 23: [https://commons.wikimedia.org/wiki/File:Trafficking\\_of\\_women,\\_children\\_and\\_men.png](https://commons.wikimedia.org/wiki/File:Trafficking_of_women,_children_and_men.png)

Text (trafficking): <https://humantraffickingawareness.weebly.com/global-trafficking.html> and <https://www.humanrightsfirst.org/>

### Page 15

Figure 24: <https://worldmapper.org/maps/carbon-emissions-2015/>

Figure 25: <https://worldmapper.org/maps/gdp-2018/>

Text: <https://www.opencanada.org/features/inequality-explained-7-ways-climate-change-and-inequality-are-connected/>

### Page 16

Figure 26: <http://www.visualcapitalist.com/decline-extreme-poverty-perspective/>

### Page 17

Text: <http://devinit.org/wp-content/uploads/2017/06/GHA-Report-2017-Executive-summary.pdf>

Figure 27: [http://www.infobarrel.com/US\\_Foreign\\_Aid\\_A\\_Historical\\_Overview](http://www.infobarrel.com/US_Foreign_Aid_A_Historical_Overview)

### Page 18

Text & Figure 28: <https://geopoliticalfutures.com/top-container-ship-trade-routes/>

<http://www.worldshipping.org/about-the-industry/global-trade/trade-statistics>

### Page 19

Text & Figure 29: [https://commons.wikimedia.org/wiki/File:South\\_China\\_Sea\\_claims\\_map.jpg](https://commons.wikimedia.org/wiki/File:South_China_Sea_claims_map.jpg)

### Page 20

Text: <https://en.wikipedia.org/wiki/Brexit>

Figure 30: <https://maproom.net/wp-content/uploads/Maproom-EU-countries.png>





