

Oceania's Climate Crisis: Coral Reef Collapse, Coastal Migration, and Economic Impacts

Environment · Practice Test · 8 Questions

1. The degradation of the Great Barrier Reef due to coral bleaching events has led to significant economic losses. What is the estimated annual economic contribution of the Great Barrier Reef to Australia's tourism sector, and what percentage decrease in tourist numbers has been observed following major bleaching events?

- A) AUD 6.4 billion; 10-20% decrease
- B) AUD 9 billion; 5-10% decrease
- C) AUD 5 billion; 15-25% decrease
- D) AUD 7.2 billion; 8-15% decrease

2. The 2022 eruption of the Hunga Tonga-Hunga Ha'apai volcano caused extensive damage to Tonga's economy. What was the estimated economic damage as a percentage of Tonga's GDP?

- A) Over 36% of GDP
- B) Approximately 18.5% of GDP
- C) Around 25% of GDP
- D) Over 10% of GDP

3. Kiribati is implementing a 'Migration with Dignity' policy. What is the primary driver behind this policy and what is the projected displacement of its population under a severe climate change scenario?

- A) Increased freshwater scarcity; 50% of residents by 2050
- B) Coastal erosion and inundation; all residents by 2100
- C) Loss of arable land due to saltwater intrusion; 75% of residents by 2060
- D) Ocean acidification impacting fisheries; 25% of residents by 2040

4. Pacific nations are actively participating in international climate negotiations like COP28, advocating for climate finance and addressing 'loss and damage'. What was the total approximate amount allocated towards climate-related projects in the Pacific by the Green Climate Fund (GCF), Global Environment Facility (GEF), and Adaptation Fund (AF) as of 2021?

- A) US\$3.5 billion
- B) US\$1 billion
- C) US\$5.7 billion
- D) US\$750 million

5. Ocean acidification poses a significant threat to fisheries in the Pacific. In the Great Barrier Reef region, a study indicated that a reduction in live coral cover from 30% to 25% could lead to a substantial decrease in the maximum sustainable yield of certain commercially important fish species. What were the projected percentage drops for coral trout and saddletail snappers, respectively?

- A) 8% for coral trout and 19% for saddletail snappers
- B) 15% for coral trout and 25% for saddletail snappers
- C) 5% for coral trout and 10% for saddletail snappers
- D) 10% for coral trout and 20% for saddletail snappers

6. Papua New Guinea (PNG) is undergoing an energy transition. What is the government's ambitious target for electricity access by 2030, and what is a key strategy to achieve this in its numerous islands?

- A) 70% of the population; expanding grid densification and off-grid renewable energy solutions
- B) 60% of the population; increasing reliance on imported fossil fuels
- C) 80% of the population; investing in new geothermal power plants
- D) 50% of the population; developing new oil and gas reserves

7. Samoa faces significant climate change impacts, including rising sea levels and increased ocean acidification. The country's government has explicitly stated that its climate goals cannot be achieved without external financing. What percentage of Samoa's GDP was impacted by the damage from the 2018 Cyclone Gita and other calamities?

- A) A quarter of Samoa's GDP
- B) 10% of Samoa's GDP
- C) 5% of Samoa's GDP
- D) 20% of Samoa's GDP

8. The World Meteorological Organization (WMO) report on the South-West Pacific highlights the accelerated rate of environmental changes in the region. How much faster have sea surface temperatures risen in this region compared to the global average since 1980, and what is the approximate rate of sea-level rise per year between 1993 and 2023 in the ocean around New Zealand?

- A) Three times faster; approximately 4.13 mm per year
- B) Twice as fast; approximately 3.5 mm per year
- C) Four times faster; approximately 5.0 mm per year
- D) Same rate as global average; approximately 3.0 mm per year