

Philippines Economic Vulnerability to Global Climate Shifts: Agriculture, Fish

Environmental Economics · Answer Key · 17 Questions

1. Which of the following Philippine sectors experienced a significant output reduction in 2024 due to drought, typhoons, and animal diseases, highlighting its vulnerability to climate change?

- A) Fisheries
- B) Energy
- C) Agriculture**
- D) Tourism

2. In 2024, what percentage of the Philippine population depended on agriculture for their livelihood, making the sector highly vulnerable to climate shocks?

- A) Approximately 10%
- B) Around 25%**
- C) About 40%
- D) Over 50%

3. What is the projected decline in rice production in Luzon by 2050 if current climate change trends continue without intervention?

- A) 10-20%
- B) 20-40%
- C) 40-60%**
- D) 60-80%

4. According to estimates, what is the potential annual cost of weather-related damages, particularly typhoons, to the Philippine GDP?

- A) 1-1.5% of GDP
- B) 1.5-2% of GDP
- C) 2-3% of GDP
- D) 3-4% of GDP**

5. Which of the following is a primary driver of the faster-than-global-average sea level rise observed in the Philippine Sea, contributing to coastal erosion and inundation?

- A) Increased volcanic activity
- B) Depletion of groundwater resources
- C) El Niño Southern Oscillation and Pacific Decadal Oscillation, alongside human activities**
- D) Expansion of mangrove forests

6. As of 2024, what was the dominant source of electricity generation in the Philippines, despite efforts towards renewable energy transition?

- A) Natural Gas
- B) Solar Power
- C) Coal**
- D) Hydropower

7. What was the estimated contribution of key blue economy sectors to the Philippine economy in 2024, representing a significant portion of the GDP?

- A) 1.5% of GDP
- B) 2.8% of GDP
- C) 3.8% of GDP**
- D) 5.8% of GDP

8. The Philippines' Blue Economy Act, enacted in 2024, aims to revitalize the ocean economy by addressing challenges such as overfishing and marine pollution. What percentage of total national employment did ocean-based industries account for in 2024?

- A) 2.1%
- B) 3.5%
- C) 4.9%**
- D) 6.2%

9. Which marine ecosystem plays a crucial role in protecting Philippine coastal towns from erosion and storm damage, but is severely threatened by rising sea temperatures and ocean acidification?

- A) Seagrass beds
- B) Mangrove forests
- C) Coral reefs**
- D) Kelp forests

10. What is the projected average decline in the maximum catch potential of all fish species combined in the Philippines' Exclusive Economic Zones by 2050 due to a two-degree Celsius warming?

- A) Approximately 10%
- B) Around 15%
- C) Almost 24%**
- D) Over 30%

11. In 2024, what was the approximate total investment in clean energy in the Philippines, showing a significant increase from the previous year?

- A) \$1.5 billion
- B) \$2.1 billion
- C) \$3.41 billion**
- D) \$5.0 billion

12. According to a UNICEF Philippines and DENR report, what percentage of the country's water supply could be depleted by 2040 due to climate-related impacts if unaddressed?

- A) 10-20%
- B) 20-40%
- C) 40-60%
- D) 40 to 80%**

13. The agriculture sector in the Philippines is a significant contributor to greenhouse gas emissions. What is its approximate share of the country's total GHG emissions?

- A) 5-10%
- B) 10-15%
- C) 15-20%
- D) 23%**

14. What was the average electricity price in the Philippines in 2024, which has seen a decrease partly due to growing renewable energy investments?

- A) ~\$150/MWh
- B) ~\$174/MWh**
- C) ~\$200/MWh
- D) ~\$225/MWh

15. Which sector's decline, due to factors like coral bleaching and habitat loss, directly impacts the livelihoods of approximately 8 million Filipinos who depend on marine and coastal resources?

- A) Manufacturing
- B) Information Technology
- C) Fisheries**
- D) Construction

16. A recent BloombergNEF report indicates that by 2028, which renewable energy source is expected to become the second cheapest source of power generation in the Philippines after solar?

- A) Geothermal energy
- B) Offshore wind
- C) Hydropower
- D) Onshore wind**

17. What is the projected GDP loss for the Philippines by 2070 in a high-emissions scenario, as indicated by the Organisation for Economic Co-operation and Development (OECD)?

- A) 5-10% of GDP
- B) 10-15% of GDP
- C) 15-20% of GDP**
- D) 20-25% of GDP