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CLIMATE CHANGE: CAUSES AND CONSEQUENCES (Introduction)

Mars, the Red planet, is one of Earth's closest habitable neighbours at an average distance of 140 million miles. But, human landing on this Earth-like planet, in the near future, is still doubtful. While human dreams of landing on Mars one day, there is a dire need to tackle the Earth's climate crisis. As, Earth remains his only home, at least for now. Climate change is the significant shift in Earth's average temperatures and weather conditions such as precipitation, wind patterns that occur over years, decades, centuries or longer. These long-term changes can be caused by natural variability in climate over time, as well as by human activities that add green house gases to the atmosphere. The consequences of climate change are evident across multiple dimensions including food supply, water availability, human health, infrastructure and the environment.

'REFORESTATION - A GLOBAL URGENCY'

THESIS STATEMENT

Reforestation is a global urgency because of global warming; natural hazards and disasters; food and water insecurity; biodiversity loss; health crisis and economic instability. However, successful reforestation efforts face numerous challenges that can hinder their effectiveness. Understanding these obstacles, is essential for developing strategies to overcome them and ensure the long-term success of reforestation projects.

'PATHWAYS TO PAKISTAN'S PROSPERITY'

THESIS STATEMENT

The pathways to Pakistan's prosperity are political stability; human development; ^{youth-led} entrepreneurship; structural reforms; fiscal sustainability; environmental sustainability; cultural heritage protection and promotion and enhanced regional connectivity.

ESSAY:**CLIMATE CHANGE : CAUSES
AND CONSEQUENCES****(Outline)****1. INTRODUCTION:**

1-1 Hook - life on Mars

1-2 Background

1-3 Thesis statement: The climate

change can be caused by natural variability in climate over time, as well as by human activities that add green house gases to the atmosphere. The consequences of climate change are evident across multiple dimensions including food supply, water availability, human health, infrastructure and the environment.

2. Causes of Climate Change

2.1 Natural causes

(a) Volcanic eruptions & fluctuations in solar radiation

(b) Movement of tectonic plates and changes in Earth's orbit.

2.2 Anthropogenic (Human-driven) causes

- (a) Fossil fuels extraction and consumption in commercial & residential areas
- (b) Greenhouse gas emissions from transportation and electricity generation
- (c) Greenhouse gas emissions from agricultural and industrial activities
- (d) Destruction of natural carbon sinks by deforestation, soil degradation and ocean warming.

3. Consequences of Climate Change

3.1 Food insecurity

- (a) Global Report on Food Crises, 2025
- (b) Integrated Food Security Analysis of Pakistan, 2025

3.2 Water crisis

- (a) Floods, Droughts and Water cycle disruption
- (b) (PCRWR) and IMF analysis of Pakistan's water crisis.

3.3 Health crisis

- (a) Heat-stroke, malnutrition, Vector-borne diseases, Water and food-borne diseases,

Respiratory and cardiovascular diseases
and mental health issues

(b) Lancet Countdown on Health and
Climate Change Report, 2025

(c) WHO Pakistan Report, 2025

3-4 Infrastructure Risks

(a) Vulnerability of infrastructure of
roads, railways, telecommunication,
electricity networks and water supply systems

(b) CRI Report, 2025 and IPCC AR6 Report

(c) NDMA Report 2025

3-5 Environment degradation

(a) Ocean acidification, coral reef
degradation and Arctic amplification

(b) NOAA Report 2025 and EEA
Report 2025

4. Adaptation and mitigation:

4-1 Adaptation

(a) Resilient infrastructure, early warning
systems, drought-resistant crops and
water conservation strategies.

(b) Adaptation cycle - Strategy by UN.

4-2 Mitigation

(a) Protecting and restoring ecosystems; transition
to renewable energy and efficient transport and
carbon tax and emission markets.

(b) The Paris Agreement under UNFCCC

5. Conclusion