

# Deforestation and Its Impact on Global Carbon Cycle

**Nico Lee**

PhD

University of Oslo

Problemveien 7, 0315 Oslo, Norway

**Adrian Anderson**

Dr.

University of Indonesia

Kampus UI, Depok, West Java 16424, Indonesia

**Morgan Williams**

Prof.

University of Lagos

Akoka, Yaba, Lagos, Nigeria

**Abstract.** This article investigates the impact of deforestation on the global carbon cycle, focusing on carbon emissions and sequestration. It analyzes the role of deforestation in climate change and explores mitigation strategies. The study emphasizes the importance of preserving forest ecosystems to maintain carbon balance.

**Keywords:** Deforestation, Carbon Cycle, Climate Change, Carbon Emissions, Sequestration

## Introduction

Deforestation significantly impacts the global carbon cycle, contributing to climate change through increased carbon emissions and reduced sequestration. This article examines the mechanisms by which deforestation affects the carbon cycle, analyzing its implications for climate change. By exploring various mitigation strategies, we highlight the importance of preserving forest ecosystems to maintain carbon balance. Our research underscores the need for effective policies and international cooperation to address deforestation and its consequences.

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