

# AN ANALYSIS OF THE RELATIONSHIP BETWEEN SDG 12 AND 13: IDENTIFYING COMMITMENT OF UVA HALPEWATTE TEA FACTORY

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## 1. Introduction

SDG 12 and SDG 13 emphasize the importance of responsible consumption and production and climate action to address global warming. If the world can maintain proper greenhouse gas concentration, global warming can be limited or controlled. In the Sri Lankan context, many researchers emphasize that Ella is a destination which has the best oxygen concentration. This study investigates the GHG emission sources and their total emission and seeks to identify the relationship between SDG 12 and SDG 13, focusing on the individual responsibility of Uva Halpewatte Tea Factory to maintain oxygen concentration in the Ella area.

## 2. Research Methodology

The researcher used the quantitative research approach to continue the study as a case study. The researcher used DEFRA and IPCC-Indian emission factors to quantify emission under scopes 1, 2, and 3. Regression and Pearson correlation analyses were conducted using MS Excel and SPSS software. Organizational level Carbon Footprint is used as a tool to identify the responsibility of the company.

## 3. Findings and Discussion

The researcher found direct GHG sources generate 42% of emissions; thus, the Uva Halpewatte Tea factory can reduce emissions. Indirect GHG emission is 32%, and other indirect GHG emissions comprise 25%. Company-owned vehicle diesel consumption emits the largest proportion of GHG emission, which is 33.5%. GHG emission from electricity consumption is 32.5%. Efficient use of natural resources (fuel, food, water, land and others) achieve SDG 13.1.

## 4. Conclusion and Implications

The company can plant shade trees, and efficient use of transportation was recommended by the researcher to reduce GHG emissions. Future researchers can use this study to identify the trend of GHG emissions at the Halpewatte Tea Factory and the responsibility of other organizations to preserve Ella's oxygen concentration and the relationship between SDG 12 and SDG 13 (sub target 12.2 link with 13.1).

**Keywords:** Climate change, GHGs emissions, Sustainable consumption and production, Sustainable Development Goals.