

A Comparative Study on Carbon Footprint among Higher Secondary School Students

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Abstract

A comparative study was done to find out the difference in the Carbon Footprint of science and commerce stream Higher Secondary School Students. To gather necessary data an online Carbon Footprint Calculator was adapted. The study was conducted on a representative sample of 60 Higher Secondary School Students. The Survey method was selected for the study. For analysis of data the statistical techniques such as arithmetical mean, standard deviation and critical ratio were used. The result showed that there is no significant difference in the Carbon Footprint for both Higher Secondary School Students of science and commerce stream. So without bothering about subject of study, teachers have to make their students aware on how to reduce Carbon Footprint for future of our planet.

Introduction

Carbon is ubiquitous in environment that human beings cannot separate it from his day today life. From simpler to even complex things carbon forms an important component. Over the years we have come across the concepts of climate change, ozone depletion, green house effect etc and the role of carbon here also is indispensable. Carbon in its limits is rewarding but beyond it is, destructive. Hence the new concept of Carbon Footprint has taken up headlines in the conservation strategies.

Background of the Problem

A definite amount of carbon is released into our environment as a part of our daily day today activities, which counts to our CARBON FOOTPRINTS. The greater the foot print,

the greater the contribution of carbon to the environment. The activities of each and every individual has a cumulative effect and contributes to global climatic problems. It is imperative to take steps to have a life style that contributes lesser carbon to the earth. . The growing developmental activities in eighties and nineties and its proliferation in the 21st century has resulted in growing concerns over Carbon Footprint on the environment and human life. Hence the term CARBON FOOTPRINT has increased its influence in the today's world and it is imperative to mould a generation that has concrete knowledge about the need and significance of the concept of abatement of Carbon Footprints.

Need and Significance of the Study

Increasing Carbon Footprint is having intense effects on the environment. Intensifying temperatures and change in raining patterns are altering the growing patterns of plants. This results in native vegetation moving to increasingly cooler climates. Sea levels are rising as the temperature increases. Warmer water needs more space to occupy than cooler water. Rising seas will not only erode shorelines and destroy ecosystems, coastal cities and towns could be displaced by rising seas. Measuring Carbon Footprint helps to take some initial steps to adapting to a changing world and creating more resilient actions.

Calculating carbon footprint allows to:

- Better understand how you contributes to climate change,
- Identify where emissions are created,
- And understand which areas need to address to reduce emissions.

The present study is to compare is there any difference in the Carbon Footprint between science and commerce stream Higher Secondary School Students.

Statement of the Problem

The present study is entitled as,

A Comparative Study on Carbon Footprint among Higher Secondary School Students

Objectives of the Study

1. To find out the Carbon Footprint between science and commerce stream Higher Secondary School Students.
2. To find out whether the science and commerce stream students of higher secondary school differ in Carbon Footprint.

Methodology

Keeping in view the objectives survey method was appropriate for the study.

Sample

The study was conducted among a sample of 60 Higher Secondary School Students and due consideration is given to subject stream.

Tool

To gather necessary data an online Carbon Footprint Calculator developed by Anthesis Group was adapted. The online tool was in the form of an inventory and the measure of Carbon Footprint can be obtained from the same online calculator in terms of 'tonnes CO₂'.

Statistical Techniques

For the present study investigator used the statistical techniques such as arithmetical mean, standard deviation and critical ratio.

Analysis and Findings

Investigator analyzed Carbon Footprint between science and commerce stream of Higher Secondary School Students and table 1 represents Comparative analysis of Carbon Footprint between science and commerce stream of Higher Secondary School Students.

Table1

Comparative analysis of Carbon Footprint between science and commerce stream of Higher Secondary School Students.

Stream	N	Mean	Standard Deviation	Critical Ratio
Science	30	2.6	0.48	
Commerce	30	2.3	0.45	1.44

Note: N denotes total number of samples in each stream.

Table 1 shows Comparative analysis of Carbon Footprint between science and commerce stream of Higher Secondary School Students. The table 1 describes that science stream Higher Secondary School Students possess mean score of 2.6 higher than that of mean score of commerce stream Higher Secondary School Students which is 2.3. The standard deviation for science and commerce stream students is found to be 0.48 and 0.45 respectively. The critical ratio calculated is 1.44 which is less than the table value 1.96 at 0.05 level of significance. It indicates that there is no significant statistical difference between science and commerce stream Higher Secondary School Students. Hence it can be interpreted that science and commerce stream Higher Secondary School Students possess comparatively same Carbon Footprint. It infers that they have comparatively same life style. So we can say that without consideration of stream of subjects for study, Higher Secondary School Students need to be more aware on how to reduce Carbon Footprint for our well being.

Ways to reduce Carbon Footprint

Once people understand the effect of their Carbon Footprint on the planet, they often want to know how they can reduce their Carbon Footprint. One easy way to reduce Carbon Footprint is to minimize the energy you waste. Shut off lights, air conditioning, and electrical

appliances when you aren't in a room and use heat and air conditioning cautiously. Switch to energy efficient light bulbs, which will not only help the planet but also help electricity bill. Conserve paper by using reusable canvas shopping bags. Buy locally grown produce or even better, start own garden. Lastly, reconsider transportation choices. Walking or riding a bike not only reduces Carbon Footprint, it brings health benefits, too.

Role of Education in Reducing Carbon Footprint

Only through a proper education about the abatement measures can we better conserve the nature for the future generations to come. Education leads to imbibing of ethical values which in turn helps man to have a value based attitude towards having a sustainable lifestyle. Present world increasingly focuses on eco-friendly life styles and education is the key factor through which it can be transact to the masses. Education about reducing the value of Carbon Footprint will invariably equip the pupil with the basic skills and attitudes to render a lifestyle that is eco-friendly and has far reaching benefits on earth. If we are ready to give clear conviction about the harmful effect of Carbon Footprint, and the various measures to reduce the amount of each one's Carbon Footprint, that education surely promotethe culture of CARBON FAST.

References

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