

## YRF- SUMMARY REPORT

### TITLE- THE ENVIRONMENTAL IMPACT OF OUR FOOD HABITS

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TEAM MEMBERS - B.A.(H) POLITICAL SCIENCE II & III Year

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### OBJECTIVES

To study the impact of our dietary habits on the environment and identify the broad dietary habits of the target group and compare the resources needed and utilized for plant-based diets and animal-based diet. To highlight the importance of indigenous crops and sustainable agricultural practices in ensuring environment protection provided by sustainable food choice alternatives.

Food production substantially depletes the environment in different ways, but little is known about how overall dietary patterns relate to these environmental impacts. The objective of this study is to evaluate the environmental performance of different dietary patterns while providing sustainable behavioral changes. Some changes in our food choices and dietary habits can counter the problem of climate change.

**Rice** farming is known to be a major contributor to climate change. It accounts for around 2.5% of all global human induced GHG emissions, rice's climate footprint is comparable to that of international aviation. Both methane and nitrous oxide are released as a result of rice farming flooding and other agricultural practices.

In **Soy**, huge areas of natural land are converted into soy plantations, causing wide-scale deforestation and other devastating knock-on effects – from biodiversity loss and rising carbon emissions to soil erosion and water contamination. The global trade and production of soy doesn't just impact biodiversity, it also affects Earth's climate, generating significant amounts of greenhouse gases.

Within the 20th century, **meat**-based diets began to symbolise wealth, along with nutritional balance. The consumption and production of meat have been negatively impacting our environment. It is known that 70% of freshwater consumption worldwide is for crops and livestock, relevant primarily

to farming and meat production. Further, half of the methane and two-thirds of the nitrous oxide released by humans is due to crop and livestock production

**Tea**, which is a common beverage, its plantations are established at the expense of natural forests, resulting in the destruction of biodiversity and soil and its manufacturing process consume a lot of energy which increases the carbon footprint of tea immensely. These differences in environmental impacts of various food items imply differences in the environmental impacts of whole diets. Currently, there is a growing demand for environmental awareness and precautionary measures to mitigate or reduce the rate of environmental degradation.

**Dairy** is an essential part of a healthy diet. Cattle are generally responsible for the 62% of the carbon emissions produced by the food industry and emit 14.5% of all global greenhouse gases. In transporting the major contributor to greenhouse emissions and climate change all of these consume fossil fuels these are the primary methods for transporting large quantities of food around the world.

## **METHODOLOGY**

**Primary Data-** To make and circulate a questionnaire having all the relevant questions among the target group.

**Secondary Data** -Collecting information from Government Archives about the historical indigenous practices. Various libraries will be visited in order to collect and collate data from all possible online resources.

## **RESPONSES**

A total of 100 participants completed the survey with all responses complete. The educational criterion that was fixed for participants was undergraduate to graduate on the university level basis. The typical kind of diet, ranging from plant based to animal based was presented among that 86.3% of participants reported that they consume plant-based diets, and 13.7% surveyors consume animal-based diets

When participants were asked about their awareness regarding any harmful impact of their diets, on environment, interestingly 83.3% participants were aware about its negative impact. Even 84.3% of them agreed that food is responsible for approximately 26% of global emission. The surveyors seemed confused and perplexed when asked about Carbon footprint.

*From the response we get to know that participants are aware of hazardous environmental impact not only on processing or consuming level but also at production level.*

More than three quarters of participants were already in action and maintenance stages of change for the sustainable dietary behaviours

## **SUGGESTIONS**

Environmental sciences to reduce the impact of food production on the environment. Implementing such a diet involves following reducing overconsumption, reducing the consumption of energy dense foods with low nutrient levels, replacing animal derived foods with plant-derived foods, and reducing food waste.

Techniques intended to reduce emissions while also cutting water use may in fact be boosting some greenhouse gases, meaning the impact of rice cultivation may be up to twice as bad as previous estimates suggest. Reducing our dependence on animal products by increasing our consumption of soy-based alternatives would help us feed more people while using dramatically less land and protect

the planet in the process. Raise all meat on feed from suppliers verifiably implementing practices to prevent agricultural run-off pollution, soil erosion, and native ecosystem clearance across their supply chain .Time-bound goals to reduce emissions across supply chain Require meat suppliers to reduce emissions from direct and contract suppliers as well as feed production In suggestion to tea ,Soil rehabilitation is a common practice before replanting tea this is done to recondition the soil.Use of biofilm biofertilizers (BFBF), At the time of disposal of used tea, it would be better if it was composted rather than just thrown away.

## **CONCLUSION**

The environmental impacts of consumption of different food items vary in terms of agricultural practices, production processes and mode of transportation. Some of the environmental issues which are related to the food we consume include climate change, greenhouse gas, CO<sub>2</sub> emissions, intensive use of resources, deforestation, irrigation problems, and waste. Rice lays considerable stress on available water resources, which are already witnessing a steep decline as an effect of population explosion, urbanisation, and industrialization. In addition, rising temperatures and unpredictable rainfall are also adversely affecting the optimal conditions required to produce rice.

Improved varieties, in any crop, are essential for achieving higher productivity. Development of holistic approaches for the assessment of sustainable food systems requires not only the development of the assessment of environmental, social, and economic impacts of such systems; on the output side, i.e., the functional unit, not only the provision of food but also food security itself, health, and nutrition should be considered.