

## Veganism: Saving The Environment & Agriculture

**Kanoj Atwal, Manish Tomar & Ruchika Choudhary**

Department Of Agronomy, RCA, MPUAT, Udaipur

**ARTICLE ID: 040**

### Introduction

From the beginning of human civilization 10,000 years ago, humans started to consume raw plant materials for their survival. With the passage of time they evolved skills and developed tools to hunt animals to meet their basic necessity of food. The need was same for the man but the desires had no end. It started with the need to fill his stomach, then to soothe & satisfy his taste buds and ultimately out of fashion, the food choices changed with the passing time. People now a day are suffering from a varied range of lifestyle disorders and food does play a vital role in it. As an old saying goes “Old is Gold”, so going minimalistic by inculcating basic plant products in diet can give a better physical health and ultimately a flourishing mental and holistic growth- So Being Vegan is the need of the hour.

The blue planet Earth is suffering. Sea levels are on high alert posing threat to many coastal cities, temperature regime has drastically changed. Global warming is the burning issue, weather abnormalities have become more common and severe too. This has led to an intense discussion on climate change globally. Now it's high time for all of us humans to contribute in conserving the health of our Mother Earth.

People of the 21<sup>st</sup> century are aware and active. Putting their efforts jointly to reduce plastic waste, water wastage and air pollution by avoiding use of plastic bags, concisely using water and using cycles as a mode of conveyance and planting more trees to not worsen the present condition. But the recent studies hint towards myriad of environmental issues due to animal agriculture. And many people are transforming their plates and palates to solve this current issue.

In 2018 Oxford University Researchers found that a vegan diet is the “single biggest thing” an individual can do to lessen their impact on the planet, thus motivating people to switch their diets. Previously people were not aware and interested in buying plant based eco-friendly products but time has changed and people are genuinely trying hard to sustain this diet and contribute in environment wellness.



## What is Veganism?

Veganism is basically a way of living that attempts to exclude all forms of animal exploitation and cruelty, whether for food, clothing or any other purpose. For these reasons, the vegan diet is devoid of all animal products, including meat, eggs and dairy.

## Why to be Vegan?

Vegans are individuals who avoid animal products for ethical, health, or environmental reasons. Instead, they eat various plant foods, including fruits, vegetables, whole grains, legumes, nuts, seeds, and products made from these foods.

## Environment & Agriculture:

- ✚ The Environmental Protection Agency (EPA) reports that roughly 80 percent of ammonia emissions in the U.S. come from animal waste. A California study found that a single dairy cow “emits 19.3 pounds of volatile organic compounds per year, making dairies the largest source of the smog-making gas, surpassing trucks and passenger cars.
- ✚ A 2010 United Nations (UN) report argued that these products generally require more resources and cause higher greenhouse gas emissions than plant-based options.
- ✚ Animal agriculture contributes to 65% of global nitrous oxide emissions, 35–40% of methane emissions, and 9% of carbon dioxide emissions.
- ✚ Global animal agriculture is a substantial contributor to environmental degradation, human health problems and animal suffering. First, animal agriculture exacerbates a number of serious environmental issues. According to recent comprehensive environmental analyses, rearing animals for food is a major cause of eutrophication, acidification, freshwater withdrawal, deforestation and climate change. It is estimated that 14.5% of entropic greenhouse gas emissions are associated with animal agriculture. Additionally, due to the demand put on land for rearing animals or growing their feed, animal agriculture is responsible for up to 91% of deforestation in the Amazon. The implications of these emissions and land use for climate change are dire. The inefficiency of converting plant calories to animal calories means that animal rearing is resource-intensive, and this contributes to global food insecurity. This is especially concerning given that demand for animal products is forecast to increase dramatically as the global population grows and becomes more affluent

## Ethics

- ✚ Vegans strongly believe that all creatures have the right to life and freedom. Therefore, they oppose the ending a conscious life simply to consume its flesh, drink its milk, or wear its skin.
- ✚ In animal farming cows, calves, pigs, chickens, turkeys, ducks, geese, rabbits, and other animals are kept in smallest space possible resulting in abusive condition for animals because in small cages or stalls, where they are often unable to turn around. They are deprived of exercise so that all their energy goes toward producing flesh, eggs, or milk for human consumption.

## Health

- ✚ Veganism helps to avoid the side effects linked to the antibiotics and hormones used in modern animal agriculture.
- ✚ Vegans tend to be thinner and have a lower body mass index (BMI) than non-vegans.
- ✚ Adopting a vegan diet may help keep your blood sugar in check and type 2 diabetes at bay. Vegans benefit from lower blood sugar levels, higher insulin sensitivity and up to a 78% lower risk of developing type 2 diabetes than non-vegans.
- ✚ Vegans may have up to a 75% lower risk of developing high blood pressure and 42% lower risk of dying from heart disease.
- ✚ Vegan diet also reduces the risk of various diseases e.g., Cancer risk, Arthritis, Kidney functioning, Alzheimer's etc.
- ✚ There are several epidemiological studies which show a correlation between animal product consumption and various health problems, including cardiovascular disease, type 2 diabetes, cancer and overall mortality. This has led to the view that a substantial reduction in animal product consumption is necessary for a global shift towards healthier diets

## Resource Consuming

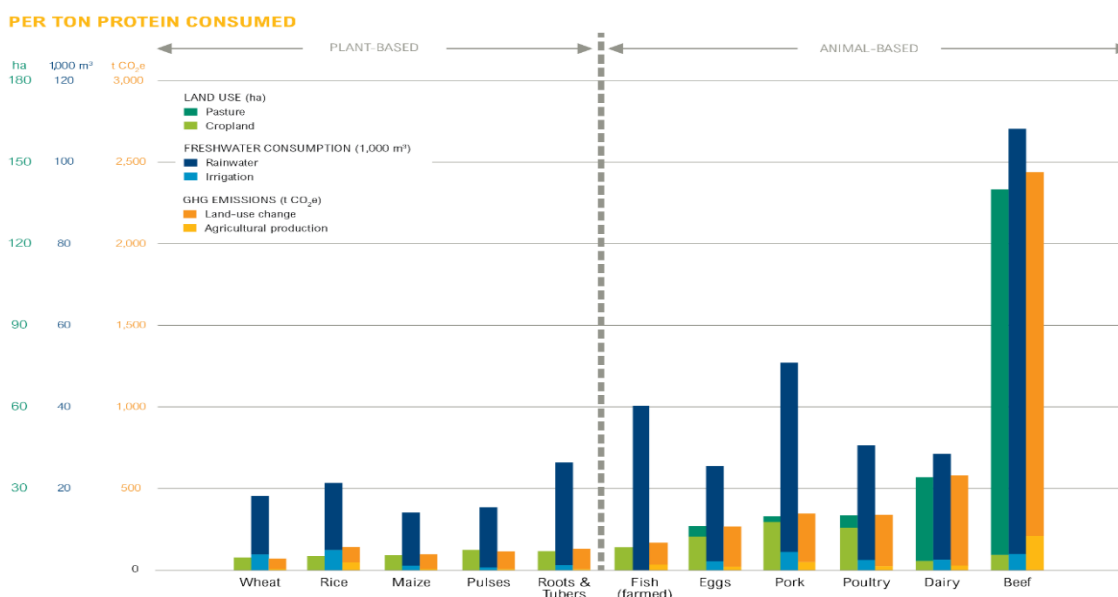
As the world's appetite for the meat products increases, so countries across the world are clearing huge swath of land to make more land available for animals as well as crops to feed them.



- ✚ According to scientists at the Smithsonian Institution, seven football fields’ worth of land is bulldozed every minute to create more room for farmed animals and the crops that feed them.
- ✚ Chickens, pigs, cattle, and other animals raised for food are the primary consumers of water in the U.S.: a single pig consumes 21 gallons of drinking water per day, while a cow on a dairy farm drinks as much as 50 gallons daily.
- ✚ It takes more than 2,400 gallons of water to produce 1 pound of cow flesh, whereas it takes about 180 gallons of water to make 1 pound of whole wheat flour.

The global food industry needs to take this into account and increase innovation within the category. However, a number of studies show that though it is a step in the right direction, veganism itself is not very sustainable. When considering the long-term impact, land availability coupled with the demand of a growing global population will be a challenge. Traversing global dietary and cultural norms, veganism will continue to play a significant role in the buying habits of environmental and health-conscious consumers. Lead author Joseph Poore said: “A vegan diet is probably the single biggest way to reduce your impact on planet Earth, not just greenhouse gases, but global acidification, eutrophication, land use and water use.”

### Animal-Based Foods Are More Resource-Intensive than Plant-Based Foods



wri.org/shiftingdiets

WORLD RESOURCES INSTITUTE

## Conclusion

Vegan diet from being easily available and easy to grow with lesser resource requirements in comparison to a diet containing animal protein but also it provides all the basic building materials required by a human body and also better suited for human body. At the same time, it addresses some of the burning global issues in sustainable ways. As being less dependent on animal food which ultimately decrease greenhouse gas emissions which will lead to lessening of global warming effect around the global and also in long term effect will helpful in mitigating climate change effect. Being dependent more on plant diet will lead to lesser resource consumption and also preventing land degradation and using them in more sustainable way and also conserving for future generations to come.

