

# Veterinary Contributions To Sustainable Agricultural Practices And Public Health



Veterinary professionals play a pivotal role in ensuring the health of both animals and humans. Their expertise goes beyond traditional animal care, directly influencing sustainable agricultural practices and public health. The [European Board of Veterinary Specialisation \(EBVS\)](#), which certifies and supports veterinary specialists across 38 fields, champions this critical intersection of animal welfare, public health, and environmental sustainability.

# The Role of Veterinarians in Sustainable Agriculture

Sustainable agriculture is about producing food in a way that protects the environment, maintains soil fertility, and supports biodiversity. Veterinarians contribute significantly to this by promoting **animal health**, which directly impacts productivity and sustainability in farming.

## 1. Preventing Disease is part of Reducing Environmental Impact

Healthy animals require fewer resources. Veterinarians implement biosecurity measures and vaccination programmes to prevent disease outbreaks, which reduces the need for antibiotics and other interventions that can harm the environment. According to the [Food and Agriculture Organization \(FAO\)](#), improved animal health reduces methane emissions from livestock by minimising inefficiencies in production.

Furthermore, grazing healthy animals on rotation with cropland actually [reduces environmental impact](#) by decreasing use of pesticides, fertilizers and can even [lower greenhouse emissions](#) - another example of how veterinary specialists in production animal species impact society and the planet at large.

## 2. Antimicrobial Stewardship

Overuse of antibiotics in agriculture contributes to the global issue of [antimicrobial resistance \(AMR\)](#). Veterinary specialists are at the forefront of **antimicrobial stewardship**, ensuring responsible use of medications to maintain their efficacy. This not only protects animal health but also safeguards human health, as resistant bacteria can transfer from animals to humans through the food chain or direct contact.

## 3. Optimising Animal Welfare

Animal welfare is a cornerstone of sustainable farming. Veterinarians develop and implement welfare standards that ensure livestock are treated humanely, reducing stress-related illnesses and improving the quality of animal products. The [European Union's Animal Welfare Strategy](#) highlights the connection between animal welfare, food quality, and farm sustainability.



## Veterinary Impact on Public Health

Veterinary contributions extend into the broader sphere of **public health**, particularly through the **One Health** approach, which recognises the interconnectedness of human, animal, and environmental health.

### 1. Controlling Zoonotic Diseases

Over 60% of emerging infectious diseases in humans are zoonotic, meaning they originate in animals. Veterinary specialists monitor, control, and prevent diseases like avian influenza, rabies, and salmonella, significantly reducing the risk of outbreaks. For instance, veterinary epidemiologists were instrumental in managing the **COVID-19 pandemic** by studying potential animal reservoirs and transmission routes.



## 2. Food Safety and Security

Ensuring the safety of the food supply is a critical public health concern. Veterinarians oversee every stage of the food production process, from farm to fork, identifying potential hazards and implementing safety protocols. This vigilance helps prevent foodborne illnesses, protecting millions across Europe.

## 3. Enhancing Quality of Life

Public health is not solely about disease prevention. By ensuring **animal welfare** and reducing the risk of zoonotic diseases, veterinarians indirectly enhance human well-being. Healthier animals lead to safer food, cleaner environments, and more robust economies, contributing to the **quality of life** for communities worldwide.

# The Economic Value of Veterinary Contributions

Veterinary expertise also has a substantial economic impact. Healthy livestock populations are more productive, contributing to the [Gross Domestic Product \(GDP\)](#) of agricultural sectors across Europe. Furthermore, preventing disease outbreaks reduces the financial burden on public health systems and mitigates economic disruptions caused by pandemics or food safety crises.

The role of veterinarians in **translational medicine** and **pharmaceuticals** also drives innovation, benefiting both animal and human health sectors.

By studying animal models, veterinary researchers contribute to the development of new treatments and therapies that can be applied to human medicine, exemplifying the integrative nature of the **One Health** approach.



## Recognising the Value of Veterinary Specialists

Veterinarians are indispensable to **sustainable agriculture** and **public health**. Their work in disease prevention, **animal welfare**, and **One Health** initiatives not only supports environmental sustainability but also safeguards human populations from health risks.

The [European Board of Veterinary Specialisation \(EBVS\)](https://www.ebvs.eu) is dedicated to highlighting and supporting the critical contributions of veterinary specialists throughout Europe. By fostering excellence across 38 veterinary fields, EBVS ensures that both animals and humans benefit from the highest standards of care and research.

Learn more about how veterinary specialists contribute to a healthier, more sustainable future at [www.ebvs.eu](https://www.ebvs.eu).