

## VETERINARIANS' ROLE IN ZERO HUNGER

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### Introduction

To accomplish various developmental target, one of the critical challenge the world facing today is, getting rid of hunger and establishing food security for all. In 2015, United Nation established Sustainable Development Goals (SDGs) for zero hunger and it targets to end hunger, achieve food security, enhance nutrition and promote sustainable agriculture by the year 2030. Zero hunger aims to end hunger and assure that everyone, everywhere has access to enough and nutritious food throughout the year. It mainly deals with the challenges like hunger, malnutrition, food insecurity that a lot of people face all around the world.

### Zero hunger: its target

To mitigate zero hunger several targets have been set which include:

1. Assuring hygienic, nutritious, sufficient foods to each and everyone throughout the year.
2. Doubling the agricultural productivity as well as livestock productivity.
3. Bringing an end to malnutrition including undernutrition, macro and micro nutrients deficiencies.

4. Use sustainable agricultural practice and sustainable livestock practice to improve productivity.

5. Promoting investment in rural areas for their rural infrastructure, agriculture research and technology development.

Efforts are being made at the level of international organisations, government, civil society and other stakeholders, but still there is a lot of work to be done to achieve zero hunger by 2030. Persistent efforts, commitment, collaborations and innovations are prerequisite for achieving this dream of zero hunger.

### Role of Veterinarians in mitigating zero hunger

The goal "Zero hunger" requires a global approach that accommodate stakeholders including veterinarians. Apart from the health and welfare of animals, veterinarians play a vital role in establishing a stable food production system by ensuring animal Health, avoiding food born illness, reducing the antibiotic resistance and enhancing the agricultural practices. This article explores the multiple roles of veterinarians in mitigating zero hunger and

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significance of their contribution.

Some important role of veterinarians in this regard include:

**1. Prevention of disease and their control:** Veterinarians play an important role in preventing and controlling diseases which affect both animal population and food production. By conducting disease monitoring and routine surveillance, developing various life saving vaccines and implementing them on the animals, and providing various biosecurity measures to diminish the outbreak of disease. Besides this, they identify various emerging diseases and protects the animal health thereby safeguarding the food producing system.

**2. Establishing good animal health:** By maintaining the good animal health, they improve the quality and quantity of animal source food. Various awareness programmes like vaccination programme, disease control programme, schedule deworming programme and by prompt diagnosis and treatment, they are able to improve the animal health and increase their population and production.

**3. One health approach:** The one health concept is the interconnection between animal, human and environmental health. Veterinarians plays an important role in maintaining the gap between animal health and public health by monitoring zoonotic diseases, conducting surveillance and collaborating between both the sectors. They also help in

early detection of emerging potential disease outbreaks which effect the food security and public health. Through the interdisciplinary cooperation of veterinarians, there is remarkable growth in holistic solutions achieving zero hunger.

**4. Quality assurance and food safety:** Veterinarians significantly contribute in maintaining the quality of food. They regularly monitor the slaughter houses and their facilities including the storage and distribution network. They augment the food safety standards by preventing the contamination of food at any level of processing so that it reaches safe in the hands of the consumers.

**5. Sustainable production in livestock sector:** Veterinarians plays a vital role in providing the knowledge about vaccination and deworming schedule, animal husbandry practices, livestock production and management, sustainable agricultural practice by using natural resources, which helps in maintaining good livestock productivity. They also provide the strategies for animal nutrition, animal welfare which maximize the production and minimize the environmental impact.

**6. Disaster management and emergency response:** During natural disaster, disease outbreaks, and other emergencies they play a crucial role in disaster management and emergency response. By preventing disease transmissions, ensuring the hygienic food

during challenging condition, rescuing and treating the animals during natural calamities their roles cannot be overlooked.

### **7. Development and research:**

Veterinarians also takes part in ongoing research and development related to animal health and hygienic food production. By conducting scientific studies and vaccine production they contribute towards the evolution of innovative strategies for sustainable food production.

**8. Zoonotic disease control:** The diseases which are transmitted between animal and human is called zoonotic disease. Veterinarians play a critical role in identifying and managing the zoonotic diseases (avian influenza, brucellosis, salmonellosis etc.) in animals to prevent their transmission in human being. By monitoring and conducting surveillance on zoonotic diseases they reduce the risk associated with foodborne illness.

**9. Food regulation in arising climate change:** Arising climate change, global warming has affected the rain and dependent agricultural production to a great extent. This gap is being filled by animals and their products in the form of milk, egg, meat, poultry, fish etc. Here veterinarian's role is unavoidable as they are in charge of their proper healthcare and production management.

**10. Reducing the food loss:** By providing expertise and advice on animal nutrition,

feeding practices, handling and storage of animal food, disease prevention, veterinarians play a key role in managing and reducing the food loss.

### **11. Providing Employment**

**opportunities:** Govt. is pressing due importance on small ruminant as well poultry production through various welfare schemes for livelihood sustenance and uplifting the economic backbone of the rural un-employed youth. Emphasis now being given for entrepreneurial activities related to livestock sector, which considered as a better jobs provider opportunities.

**12. Training to rural youths:** Quality trainings pertaining to capacity building as well as skill developments being imparted by the veterinarians to the farming community on livestock sector for making them self-sufficiency in searching their livelihood sustenance opportunities.

**13. Nutritional security:** Constant effort by veterinarians in improving livestock and poultry germ plasm with aim of high production of meat, milk and eggs will cater the needs of zero hunger related to nutritional security and protein malnutrition, thus directly or indirectly providing a better future generation to our country with perfect balance of mind and body.

## 14. Protecting the rural economy in

**Natural calamities:** Animal husbandry is the only industry which now considered as a best alternative in the changing climatic scenario, inadequate rainfall and frequent occurrence of natural calamities to provide a sustainable income to farmers at the time of urgency. Veterinarians play a greater role in safeguarding the livestock from different calamities and thereby protect the economic backbone of farmers both in state as well as country.

### **Conclusion:**

In a nutshell, the aim to achieve zero hunger is a multifactorial challenge. Veterinarians' role is indispensable in mitigating zero hunger by enhancing the animal health, preventing diseases, ensuring food hygiene and food safety, promoting sustainable livestock production, and encouraging one health concept. Their efforts need to be recognised and supported to achieve global goal of zero hunger and food security for millions of people world-wide.