

Achieving the Sustainable Development Goals

The Value of Healthier Animals



The Challenge Ahead

By 2030, our global population is expected to grow to 8.5 billion – nearly 1 billion more than live on our planet today. Sustainably providing for their health and livelihoods is paramount, but we face significant hurdles.

Health

- 690 million people go to bed hungry each night, while 1 in 5 children under the age of five worldwide suffer from stunting due to severe malnutrition¹
- Societies are underinvesting in mental health according to the WHO, and 264 million suffer from depression around the globe^{2,3}
- Covid-19 has shown the growing threat of zoonoses. These diseases are increasingly jumping from wildlife to people, pets and livestock in nearby communities.

Poverty

- 734 million people worldwide suffer from extreme poverty, and this is expected to rise significantly in the wake of the Covid-19 pandemic^{4,5}
- The World Bank estimates that "without intensified action, the global poverty goals will not be met" by 2030⁶

Production

- An extra billion people on our planet by 2030 means we must produce more food than ever before. Yet, 20% of livestock production is lost to disease each year while 1/3rd of all food produced is wasted^{7,8}
- Simply increasing the size of current production systems to meet our future needs would require unsustainable increases in natural resources use. We must increase production efficiency and drastically cut food waste from farm to fork.

Climate

- The past decade has been the warmest ever recorded, leading to a marked rise in extreme weather events like floods and droughts⁹
- Farmers are considered "highly exposed" to climate change and the growing impacts will affect their ability to feed our world









The Sustainable Development Goals

These challenges are why the United Nations established the Sustainable Development Goals (SDGs) — our global "blueprint to achieve a better and more sustainable future for all" by 2030.

The United Nations estimates the world is behind in achieving the SDGs and current efforts are "insufficient." We must dramatically increase and accelerate our efforts if we are to achieve these goals in the coming decade.



One Health Approach

In order to meet the significant challenges ahead and deliver upon the SDGs, our world must consider the role of animals. Outbreaks of livestock disease can reduce production of meat, milk and eggs, leading to shortages of these nutrient-rich foods. Meanwhile, pathogens in wildlife can cross over into vulnerable populations of people and domestic animals, as we saw with Covid-19.

Our future is clearly intertwined with animals and the environment.

All three – people animals, and environment – share "One Health". What affects one, will affect the others. It's why improving the health of animals can strengthen efforts to achieve key SDGs by 2030.

Healthy animals can contribute to key SDGs



Livestock provide an irreplaceable pathway out of poverty for a billion people, while offering valuable nutrition for communities.



Our mental health is a cornerstone of well-being, and pets provide faithful support during difficult, stressful times.



Healthier animals have a smaller environmental footprint, it's why the UNFAO says "animal health is necessary for sustainable livestock production

We face significant challenges in achieving the SDGs by 2030. However, a One Health approach that recognizes the value of healthier animals can help us meet the challenge ahead.

- 1 FAO http://www.fao.org/hunger/en/
- 2 WHO https://www.who.int/news/item/14-05-2020-substantial-investment-needed-to-avert-mental-health-crisis
- 3 WHO https://www.who.int/news-room/fact-sheets/detail/depression
- 4 World Bank https://www.worldbank.org/en/topic/poverty/publication/fragility-conflict-on-the-front-lines-fight-against-poverty
- $5 \ United \ Nations: https://www.un.org/development/desa/en/news/sustainable/sustainable-development-goals-report-2020.html$
- 6 World Bank https://www.worldbank.org/en/topic/poverty/publication/fragility-conflict-on-the-front-lines-fight-against-poverty 7 United Nations https://news.un.org/en/story/2013/09/448652
- 8 OIE: https://www.oie.int/fileadmin/Home/eng/Media_Center/docs/pdf/Key_Documents/ANIMAL-HEALTH-EN-FINAL.pdf 9 UNRIC https://unric.org/en/2010-2019-confirmed-as-warmest-decade-in-history/

Principles of **Sustainability**

The challenges we face in the coming decade are significant, but healthy animals can accelerate efforts to fulfill the Sustainable Development Goals. The Animal Health sector has the knowledge and experience to help make this a reality. HealthforAnimals and its Members have adopted six principles as the foundation for our sector's commitment to healthy animals and sustainable development plan.

These six principles will guide the work of HealthforAnimals and its Members from now until 2030. We encourage others to adopt them and work with us on achieving the Sustainable Development Goals.



Principle 1 Strengthen Global Cooperation

The SDGs offer a common vision where every stakeholder and sector can take supporting action. HealthforAnimals Members believe cooperation and partnerships that embrace One Health can more effectively tackle complex problems like health and hunger. However, more One Health partnerships that recognize the value of healthy animals to people and our environment are needed to meet the SDGs by 2030.



Principle 2 Data-Driven Decision Making

Annual UN updates warn that our progress is insufficient and achieving the SDGs by 2030 will be difficult. With only 10 years to reverse this trend, we cannot afford missed opportunities or wasted efforts. HealthforAnimals Members believe sustainability decisions must be guided by clear, transparent and verifiable data. This allows all stakeholders to understand the expected outcomes and support efforts to achieve them.



Principle 3 Minimize our Footprint

Raising an animal offers better lives and livelihoods to billions, and achieving the SDGs requires animals to be healthy. Sick animals require more water and feed, while a farm animal lost to disease means another is raised elsewhere to meet market demand. HealthforAnimals Members believe healthy animals are more sustainable. We are committed to delivering the tools needed to prevent, diagnose and treat animal disease, while also continuing to reduce the footprint of our supply chain.

Call to action

20% of livestock production is lost to disease every year while countless pets lack the vital veterinary care¹. This situation harms not only the animal, but the family and community that rely upon them. Simply put – this situation is unsustainable. The world must support better veterinary care for animals. The necessary tools are available – vaccines, biosecurity, diagnostics, antibiotics and surveillance. However, adoption rates are stubbornly low in many regions as access and expertise are still significant hurdles. Realizing the contributions of animals to the SDGs requires protecting their health and empowering those who care for them. These six principles can guide efforts to achieve this goal.



Principle 4 Innovate for a Better World

Taking on tomorrow's challenges requires hard work today. New innovations and practices necessitate years of research and painstaking effort, but the results can change the world. Innovations in the animal health space are improving the diagnosis, prevention and treatment of animal disease. HealthforAnimals Members are committed to building a deeper understanding of animal health reducing animal testing and delivering vaccines, diagnostics, digital tools, and more that can improve how we care for animals.



Principle 5 Support Animal Caretakers

Animals are an untapped catalyst in our effort to accelerate SDG progress, and unleashing their potential means supporting those who care for animals. HealthforAnimals Members believe farmers, veterinarians and pet owners need greater recognition for their role in protecting the health of animals. Animal caretakers have worked to strengthen animal health and sustainability in recent decades, and their continued efforts will be needed to build a sustainable future.



Principle 6 Prioritize Animal Health and Welfare

If animals can help us achieve the SDGs, then protecting their health and welfare must be prioritized. Only healthy, thriving animals can provide safe food, power economic growth and strengthen our well-being, while reducing the need for antibiotics requires controlling animal disease. HealthforAnimals Members believe good animal care is at the heart of sustainability. Strengthening the prevention, detection and treatment of animal disease will be essential in the coming years.

Value of Livestock to a Sustainable Future

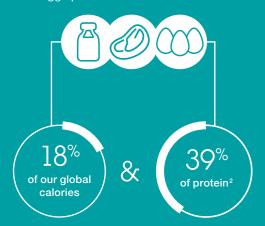
According to the United Nations, over 1.3 billion people around the world raise livestock.9 It drives 40% of global agricultural GDP while supplying protein and important micronutrients, which are especially valuable for the health and development of children.9 However, maintaining these benefits in the face of a growing population will require reducing the environmental footprint of livestock. Production that supports good health, economies and environment can help us achieve key Sustainable Development Goals (SDGs) by 2030. Better animal health will be at the core of this effort.

Healthy people

Milk, meat and eggs from livestock are a cornerstone of global food security. These foods provide valuable micronutrients such as calcium, iron, zinc, calcium and Vitamin A. For children, these nutrients are essential for proper growth and in many regions, food from livestock are often the only way they can obtain them.

It's why the World Organisation for Animal Health has said livestock-sourced foods are "an inherent part of any food security policy including child growth and brain development":

Today, livestock-sourced foods like milk, meat and eggs provide:



To produce these calories and nutrients, livestock like cattle primarily eat plants that are inedible to people. 86% of their diet are grasses, leaves, oil seeds, etc., which means livestock are converting these materials that we cannot eat into valuable, nutritious foods.2

However, food must be nutritious for a healthy population. Right now, two billion suffer from a lack of proper nutrition known as 'Hidden Hunger', while 144 million children suffer from stunting.3,4 Milk, meat, eggs and fish are nutrientdense foods that can alleviate these issues.





Studies show children in developing regions who regularly drink milk and eat meat perform better in cognitive, physical and social tests while displaying higher levels of academic performance.5,6

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USDA researchers found animal sourced foods could "further the effort to eradicate extreme poverty and hunger" and the OIE calls them an "inherent part of any food security policy".7



2. FAO http://www.fao.org/ag/againfo/home/en/news_archive/2017_More_Fuel_for_the_Food_Feed.html 3. FAO http://www.fao.org/3/i8384en/l8384EN.pdf

5. Animal source foods have a positive impact on the primary school test scores of Kenyan schoolchildren, https://pubmed.ncbi.nlm.nih.gov/24168874/
6. Meat Supplementation Improves Growth, Cognitive, and Behavioral Outcomes in Kenyan Children, https://academic.oup.com/jn/article/137/4/1119/4664672
7. The Importance of Milk and other Animal-Source Foods for Children in Low-Income Countries, https://journals.sagepub.com/doi/

8. ILRI, https://www.ilri.org/publications/livestock-pathway-out-poverty-ilris-strategy-2010

Strong Economies and Livelihoods

Livestock production is one of the most consequential sectors on the planet and essential to economies, especially those in developing regions. It's why livestock has been called an essential 'pathway out of poverty'.8 By acquiring livestock, households in developing regions improve their economic situation.

Livestock production employs 1 out of every 6 people worldwide and produces US\$1.27 trillion each year.9



This means if livestock sector was a country, it would be the 15th largest economy in the world.10

Studies show when developing households acquire livestock, they report better income and credit access.11







Protecting Climate and Natural Resources

Livestock's contributions cannot come at the expense of environment. Meeting the needs of our world in 2030 requires continuing to reduce emissions and natural resource use through improved practices. For instance, the UNFAO has found:



Industrialized nations have reduced land requirements for livestock by 20% while doubling meat production in recent decades.9



GHG emissions per kilogram of milk fell almost 11% from 2005 to 2015.13



Increased adoption of existing animal health, husbandry, feed, and management technologies and best practices could lower livestock emissions by as much as 30%.9

Individual sectors have also used new technologies to cut their footprint. For example. in the United States:



Chicken producers have reduced emissions by 36% since 1965.12



Greenhouse gas emissions for egg production is down 71% over the past 50 years.14



Cattle farmers use 33% less land to produce beef compared to the 1970s. while dairy farmers have a 19% smaller carbon footprint compared to 2007.15,16



Pig production cut their carbon footprint 7.7% by reducing water use by 25.1% and land use by 75.95% between 1960 and 2015.17

These steps have helped livestock limit its share of direct climate emissions to 5%, according to the IPCC. Sustainably meeting the needs of 8.5 billion in 2050 requires further improvements though, and better livestock health will be essential.18

- 9. FAO, http://www.fao.org/news/story/en/item/1157729/icode/ 10. World Bank, https://databank.worldbank.org/data/download/GDP.pdf
- 11. One Cow per Poor Family Pro-gram "GIRINKA" https://www.minagri.gov.rw/index.php?id=28

 12. National Chicken Council: https://www.nationalchickencouncil.org/national-chicken-council-unveils-new-sustainability-resources/
 13. FAO: http://www.fao.org/3/CA2929EN/ca2929en.pdf

 14. American Egg Board: https://www.aeb.org/images/PDFs/FoodManufacturers/WP-sustainability.pdf

- 15. US Dairy: https://www.usdairy.com/sustainability/environmental-sustainability
 16. The environmental impact of beef production in the United States: 1977 compared with 2007: https://pubmed.ncbi.nlm.nih.gov/21803973/
- 17. Pork Checkoff: https://www.pork.org/news/study-shows-u-s-pig-farmers-making-major-sustainability-progress/18. Reuters: https://news.trust.org/item/20180918083629-d2wf0





Importance of Pets to **Better Health**

The United Nations Sustainable Development Goals (SDGs) are a blueprint for a "better and sustainable future for all," and at the core is SDG 3: Good Health and Well-Being. Securing our future requires healthy, active populations and an increasing number of people are recognizing the positive role of pets in achieving this goal. However, as pet populations rise around the globe, it is essential that societies ensure the necessary veterinary care is available to ensure good health for these animals. Their contributions to the SDGs are only possible when they are well-cared for and safeguarded against illness.



Strong Start to Life

More than 339 million people worldwide live with asthma. This lung condition creates difficulty breathing, coughing and wheezing, which can lead to severe health complications. However, the condition can be managed and possibly prevented. Research increasingly shows childhood exposure to pets is proven to drastically reduce incidence of allergies and asthma, which can lead to healthier lives.



A study of over 650,000 children found those who lived with pets had a lower chance of developing asthma and allergies.1



Another tracked children for their entire youth (0 - 18) and found those who had a dog or cat during their first years had an approximately 50% less chance of developing pet allergies.2

Resilient Minds

The WHO has identified depression as the leading cause of disability worldwide. It's one reason why positive mental health is essential to SDG3, and pets can help make that a reality:

- Pets and therapy animals are proven to alleviate stress, anxiety, depression, and feelings of loneliness and social isolation.3
- For children requiring serious medical treatment and hospitalization, dogs have been shown to improve their mood and reduce their stress during the experience.4



- Among elderly pet owners, 80% say their pet reduces their loneliness. 54% say their pet helps them connect and socialize with others.5

- 1. Early Exposure to Dogs and Farm Animals and the Risk of Childhood Asthma, https://jamanetwork.com/journals/jamapediatrics/fullarticle/2467334
- 2. Lifetime Dog and Cat Exposure and Dog and Cat Specific Sensitization at Age 18 Years, https://habricentral.org/resources/58578
- 3. HABRI: https://habri.org/research/mental-health/
- 4. HABRI, https://habri.org/research/child-health/mental-health/
- 5. HABRI, https://habri.org/research/healthy-aging/mental-health/

Healthier Lifestyle

Regular exercise is important to physical health, and pets are one of the best ways of increasing activity levels. This leads to improvements in heart health that bring us closer to achieving SDG3 such as:



Owning a pet reduces overall risk of cardiovascular disease, according to the American Heart Association.6



One assessment of over 2,400 cat owners concluded they had a significantly lower relative risk for death due to cardiovascular diseases, including stroke and heart attack, compared to non-owners.8



Research has found pet owners tend to have lower levels of blood pressure, cholesterol and obesity.7



Healthier owners reduce the burden on healthcare systems. Studies estimate that pet ownership saves \$11.7 billion in healthcare spending annually in the US and £2.45 billion in the UK through reduced obesity and physician visits.9,10

Doctor Approved

Pets are our partners in good health. A recent survey of physicians found that these medical professionals often rely on pets to help improve their patients' recovery, treatment or overall health.



...report there are health benefits to owning a pet.



...have recommended a patient to get a pet.



...said they saw patients overall health improve due to pet ownership.



...have used pets to assist patient therapy or treatment.11

- 6. American Heart Association, https://www.ahajournals.org/lookup/doi/10.1161/CIR.0b013e31829201e1
- 7. HABRI: https://habri.org/research/healthy-aging/cardiovascular-health/
- 8. Cat Owners and the Risk of Fatal Cardiovascular Disease, https://habricentral.org/resources/58614
- 9. HABRI: https://habri.org/assets/uploads/HABRI_Report_-_Healthcare_Cost_Savings_from_Pet_Ownership_.pdf
- 10. CABI: https://www.cabi.org/news-article/pets-could-save-nhs-up-to-2-45-billion-a-year-new-report-quantifies-economic-benefits-of-uk-pets/
- 11. HABRI: https://habri.org/pressroom/20141027

The Animal Health Factor

Animals will be at the center of the global effort to achieve the Sustainable Development Goals (SDGs) by 2030. But with a growing population, rising middle class and a need for stronger public health, we must further strengthen their contributions. Improving animal care offers the opportunity to accelerate our drive to achieve the SDGs.



Challenge of Animal Disease and Poor Health

Countless animals fall ill with disease every day, harming their welfare, the environment, and our health.



20% of livestock are lost to disease each year, and those who survive require more natural resources and may never produce as much in their lifetime.¹ Sick animals are food wasted early in the food chain.



2.2 million

For diseases that are zoonotic, our health can be put at risk. Just 12 zoonotic diseases were found to sicken 2.5 billion people each year and kill 2.2 million.³





Death and disease mean the environment footprint of an animal grows. One study found that cattle disease can increase GHG emissions by up to 24% per unit of milk and 113% per beef carcass.²



191 million stunted children

Lost livestock means
less food available to
tackle fundamental SDG
challenges like malnutrition,
which currently leads to
stunting in 191 million
children each year.4

- 1. OIE: https://www.oie.int/fileadmin/Home/eng/Media_Center/docs/pdf/Key_Documents/ANIMAL-HEALTH-EN-FINAL.pdf
- 2. Livestock and climate change: impact of livestock on climate and mitigation strategies, https://academic.oup.com/af/article/9/1/69/5173494
- 3. ILRI: https://cgspace.cgiar.org/handle/10568/21161
- 4. FAO http://www.fao.org/hunger/en/
- 5. FAO: http://www.fao.org/animal-health/en/

Healthier Animals, People and Planet for Healthier Lives

Improving animal health fights these challenges and strengthens our ability to fulfill key SDGs like:



SDG2: Zero Hunger

With our population rising, we must feed more people in the coming decade than ever before. Fewer animals lost to disease means less food waste and more milk, meat and eggs available for our tables.

Animal health is necessary for sustainable livestock production.

SDG12: Responsible Consumption and Production SDG13: Climate Action

Healthier animals have a smaller environmental footprint. As the FAO states: "Animal health is necessary for sustainable livestock production."⁵



SDG3: Good Health and Well Being

Healthier pets and livestock mean healthier people. It reduces risk of zoonotic disease transfer and development of antimicrobial resistance, while livestock help ensure we have foods that can reduce malnutrition.



SDG1: No Poverty SDG8: Decent Work and Economic Growth

When a farmer in a developing region with a few chickens or head of cattle loses a single animal, it can devastate their family. Protecting animal health can grow economies and lift hundreds of millions out of poverty.

How to Improve Animal Health

Prevention

The first line of defense against illness. It relies on robust vaccination, nutrition, biosecurity and husbandry.

Surveillance

Monitoring disease spread helps veterinarians track, predict and respond quickly to outbreaks.

Diagnosis

Quickly identifying and diagnosing disease allows veterinarians to provide the ideal treatment.

Treatment

The right medicine at the right dose for the right duration. That's effective treatment of disease.

The animal health sector offers products and services in all four areas

