



The United Nations estimates that by 2050 there will be an additional 2 billion people in the world. To feed them, we will need to help animal producers become more efficient and more sustainable.

#### MSD Animal Health

Animal diseases cost farmers a significant proportion of their meat, fish and dairy yield every year. In fact, the World Organisation for Animal Health estimates that animal disease reduces global food production by at least 20 percent.<sup>1</sup> Its impact on food output is greatest in developing countries, where two-thirds of the world's 1.5 billion poor are reliant on livestock as their main source of food and income.<sup>2</sup> Preventing disease-related costs will also be crucial if we are to meet the increasing demand for animal protein created by rising standards of living and population growth. In addition, the land and water available for agriculture is decreasing. Not only will food-producing animals have to stay healthy, but they will also have to be reared more efficiently.

As economies continue to grow and lifestyles change around the globe, the global appetite for meat, milk and eggs increases. In fact, the Food and Agriculture Organization of the United Nations (FAO) expects the global demand for animal protein to double by 2050.

Our portfolio of [Animal Health products and services](#) is focused on helping farmers keep their livestock healthy and productive. Targeted intervention with vaccines, antiparasitics, anti-infectives, and other veterinary medicines and services helps protect the health and well-being of animals, and helps producers to avoid and/or limit their production losses.

### PROTECTING POULTRY FLOCKS AND ENSURING THE LIVELIHOOD OF FARMERS

The introduction of SAFE-GUARD® AQUASOL (fenbendazole oral suspension) for use in U.S. poultry operations is helping poultry farmers to manage the gastrointestinal health of their flocks, resulting in better overall performance. Consistent uniformity, productivity and profitability are priorities for all of our customers. The innovative wet-milling technology used to produce SAFE-GUARD AQUASOL ensures treatment for the entire flock and produces a highly stable suspension that can be conveniently administered through drinking water for a short, five-consecutive-day treatment period.

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Another innovation is our SPHEREON® technology, which freeze-dries poultry vaccines into small, highly soluble particles (spheres) instead of the traditional vaccine cake in a glass bottle. SPHEREON vaccines are packaged in lightweight, 100 percent recyclable aluminum cups in convenient dose sizes. These individual cups are then packaged in post-consumer plastic that is also recyclable. For poultry producers, the implication of this technology is that no component of SPHEREON packaging needs to be sent for medical waste incineration. Dissolving the particles is fast and convenient for administration of the vaccine via water, spray or eye drop. To meet the fast-growing demand, in 2016 our company made an investment in expanding our production facilities in Salamanca, Spain.

Our Animal Health business is committed to environmental responsibility – in particular, working toward the offset of carbon emissions. As part of this commitment, we have renewed our partnership with [WeForest](#), an international nonprofit association engaged in large-scale sustainable reforestation and reduction in plastic pollution. Through the partnership, we will plant 20,000 trees this year in areas where they are most needed, including Brazil, India and Zambia.

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## According to the National Academy of Sciences, currently half of all the fish consumed globally is farmed.

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Demand for fish is also rising, and farmed fish are becoming more important as a source of healthy, sustainably sourced protein. In order to meet this demand and protect wild fish, our SLICE® Sustainability Project, developed in partnership with fish farmers, continues to help control parasites and keep fish healthy. SLICE (emamectin benzoate) controls sea lice, the naturally occurring parasites that live in the ocean and threaten the health and welfare of salmon. Our “IDENTIFY-CONTROL-PROTECT” program helps fish farmers to identify the strain and biotype of *Streptococcus agalactiae* present on their farm, implement a surveillance, biosecurity and vaccination program, and train staff on appropriate control strategies against the most prevalent disease affecting tilapia.

In addition, educational events like our High Quality Tilapia Congresses are presented as part of our commitment to bringing the science of healthier animals to aquaculture producers globally.

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1. <http://www.oie.int/for-the-media/editorials/detail/article/feeding-the-world-better-by-controlling-animal-diseases/>.

2. OIE, B. Vallat. Opening speech, European Veterinary Week, Brussels, Nov. 10, 2008.