

# Global Megatrends of Livestock Production and Pet Ownership



The world is affected by increasing depletion of natural resources. And as the global population continues to grow, the demand for animal protein is rising in tandem with dietary changes and new challenges regarding disease transmission are emerging.<sup>1</sup> Global trends like this impact, and sometimes exert pressure on, the reputation and business of the animal health sector, as disease dynamics for animals and humans are becoming increasingly challenging to handle.

With the adoption of the United Nations Sustainable Development Goals (SDGs)<sup>2</sup> by the UN Member States, sustainable development has become a strong global commitment endorsed not only by governments but also by the private sector. This may offer unprecedented opportunities for the private sector, as the commitment of multilaterals to scale up global efforts in mitigating social, environmental and economic mismatches could ultimately translate into long-term business opportunities.

The megatrends most impactful for the animal health industry:

1. Demand and production for animal protein sharply increases, particularly in Africa
2. Productivity increase per animal
3. Number of farms decreases whereas farm sizes increase
4. Changing food systems and resulting impact on farmers' livelihoods
5. Demographic change and income increase leads to growing pet market, especially in BRICS
6. Depletion of the earth's natural resources and increased competition for these resources
7. Emerging challenges in disease transmission

## Dietary Change and the World Food Economy

The world food economy is increasingly driven by the shift in diet and food consumption patterns towards proteins derived from animals. In tandem with human population growth, rising incomes and urbanisation, we see an increased demand for a protein-rich diet.<sup>3</sup> The consumption of animal proteins is mainly driven by population growth in developing countries. Aspects like per capita income growth and changing consumer habits also account for the projected increase in consumption of animal proteins. Meat consumption is not expected to rise in most affluent countries over the coming years because of growing social concerns (e.g. animal wellbeing), health concerns and aging population, but in Africa and Asia, meat consumption is rising.<sup>2</sup> Poultry is the primary driver of the growth of total meat production, followed by pig meat.<sup>5</sup> Low production costs and lower product prices have contributed to making poultry the meat of choice for both producers and consumers in developing countries.<sup>6</sup>

Owing to lower margins and innovation hurdles, business engagement in countries where megatrends are most dominant is simultaneously the most challenging. As mentioned, the largest increase in consumption of animal

proteins will be in developing countries. Additionally, in those countries most affected by the consumption increase, production will increase too. The business model of many global food-producing companies is aimed at producing more in order to address the rising global demand for animal proteins and thus contributing to global food security. This approach is contested, as it is rather expected that developing countries will experience a sharp intensification and professionalisation of the livestock sector themselves – for instance, by enhancing productivity per animal – which in turn holds clear potential for animal health products.

## Sustainable Livestock

The projected growth in the livestock sector will only be sustainable if environmental, social, and economic challenges are addressed simultaneously. The livestock sector needs to consider and counteract challenges in the depletion of natural resources, climate change, widespread poverty, food insecurity, and global threats to animal and human health. Food security can only be met by sustainably improving productivity and resource-use efficiency. Only then will it be possible to mitigate the pressure on the earth's natural resources and to promote socially inclusive agricultural systems.

Sustainable livestock production can help to address this efficiency gap and minimise the negative environmental and social implications of livestock supply chains. The goal is to make livestock more productive without ignoring negative environmental and social impacts. The increased demand for animal-source food ultimately results in incentives for farmers to upgrade domestic livestock production. This may strengthen the role of progressive disease control, because animal wellbeing and health are prerequisites of higher productivity, since animal diseases account for a significant loss of productivity.

Besides environmental and economic aspects, the social implications of the higher demand for livestock products are also important considerations. The growth and transformation of the sector offer opportunities for agricultural development, poverty reduction and food security gains, but the rapid momentum of change risks marginalising smallholders. Hence, systemic risks to natural resources, as well as human health and wellbeing, must be addressed to ensure sustainability. Where livestock is important to the country's economy, there is always an incentive to invest in progressive disease control and prevention.

## Animal Wellbeing and Good Husbandry

Animal wellbeing is an issue of growing concern for consumers, pet owners, retailers, businesses, investors, regulators, civil authorities and non-governmental organisations (NGOs). However, the perception of good animal wellbeing varies immensely from region to region, owing to cultural, social and economic disparities. Similar to the One Health approach regarding the use of antibiotics, we see a growing understanding of animal wellbeing as a concept that provides a platform for fostering interdisciplinary collaboration to improve both human

and animal welfare (One Welfare). This concept suggests acknowledging the strong correlation between animal wellbeing and human wellbeing. Healthy and well-treated animals will help reduce the risk of food-borne and zoonotic disease as well as contributing to food security.<sup>7</sup> As a result, food companies at all points along the supply chain, drive higher wellbeing standards in response to the demands of their customers.

Consumer behaviour in more affluent societies tends to play a critical role, as animal wellbeing becomes more and more an issue of concern. The condition of farm animals is strongly associated with both the safety and the quality of food. As a result, we see a trend for greater consumer awareness, especially in Europe, but increasingly also in other markets, directly linked to a demand for products complying with animal wellbeing standards. Producers who maintain high standards have a competitive advantage as consumers are more and more prepared to pay for higher food safety norms. Achieving better lives for animals will require collaboration among stakeholders and capacitybuilding for animal owners and keepers.



*Land-use changes, environmental hazards and climate change cause significant disruptions within disease dynamics for humans and animals*

### Disease Transmission

Animal health and animal disease dynamics are influenced by environmental and societal impacts. The health and wellbeing of humans and animals alike is increasingly threatened by emerging and re-emerging diseases. Furthermore, the development of societies will continuously be hindered by neglected tropical diseases (NTDs) affecting humans and animals. In addition, there is a global redistribution of disease complexes due to climate change, together with land-use changes, wildlife interaction, changes in lifestyle, livestock intensification, and globalisation. An increase in environmental hazards, as a result of climate change, for example, pervades the animal

health industry from various direct and indirect angles. We are facing emerging diseases, like avian influenza, Ebola or Zika, with previously unknown aspects in terms of the ecology, the distribution pattern of pathogens, interspeciestransmission, host-switching, and the symptoms of disease. The interplay between humans and wild and domestic animals and the interconnections between host reservoirs, vectors and pathogens lead to new challenges for animals and public health.

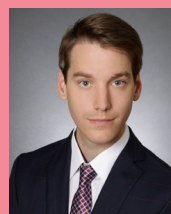
Because of increasingly intensified livestock production systems, the spread of diseases is likely to increase as well. The more animals are kept on a farm, the more likely they are to be subject to infections. Thus, the demand for health management strategies to prevent parasitic, bacterial and further infection becomes a key differentiator for successful businesses. Socio-economic wealth increases companion animal ownership. The trend towards megacities further accelerates this demand, with additional pet animal species beyond the current favourites, dogs and cats. Close interaction with increasing numbers of pet animals in communities will continuously drive the demand for companion animal products, especially to prevent viral and parasitic diseases.

### Summary

In order to safeguard the health of animals in light of megatrends emerging in livestock and pet ownership, animal disease threats need to be managed through a holistic multi-stakeholder approach and by simultaneously addressing environmental, social, and economic challenges. It is important to understand how demographic and economic changes that are likely to unfold over the coming years would affect the animal health sector and how megatrends can be addressed in the face of emerging challenges. Sustainability is becoming the number one business approach for the future to address challenges and opportunities at the same time in a rapidly changing world – a world that has pledged itself to meet the needs of the generations to come.

### REFERENCES

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6. Ibid.
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