## Global Trend of Greenhouse Gas Emissions Impacting Climate Change and Increasing Food Insecurity

Food insecurity due to climate change requires immediate attention and intervention. The latest report conducted by the Intergovernmental Panel on Climate Change (IPCC)<sup>1</sup> states many alarming facts about how climate change is expected to negatively affect food systems and the health of individuals around the world, especially the health of vulnerable communities, minority groups, and people of low socio-economic status. Crops are expected to contain fewer nutrients in the upcoming years due to an increase in harmful emissions that alter the atmospheric temperature.<sup>1</sup> This further contributes to increasing food insecurity, undernutrition, and malnutrition already experienced by millions worldwide.<sup>1</sup>

The agricultural sector alarmingly contributes approximately 21-37% of total greenhouse gases (GHG) and it is expected to increase up to 40% by 2050. 
It is estimated that animal agriculture produces 14.5% of global GHG emissions. 
Developing public health policies that advocate for reducing the mass production of meat and animal products may drastically improve public health. Effective policy analysis may be achieved if many global and environmental public health professionals advocate for a common goal. Food policies that influence a reduction in livestock production are crucial for decreasing large amounts of GHG emissions currently contributing to climate change; reducing GHGs is imperative for preserving the nutritional quality of food and decreasing food insecurity projected for the near future.

Demí Hernández February 13, 2023

## References

- 1. Intergovernmental Panel on Climate Change. Chapter 5 Food Security. 2022. https://www.ipcc.ch/srccl/chapter/chapter-5/
- 2. Gerber, P.J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Falcucci, A. & Tempio, G. Tackling Climate Change Through Livestock. *Food and Agriculture Organization of the United Nations (FAO).* 2013. https://www.fao.org/3/i3437e/i3437e.pdf