

EFFECT OF LIVESTOCK FARMING ON CLIMATE CHANGE AND MITIGATION STRATEGIES



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INTRODUCTION

Pollution levels have increased in recent years, with agricultural and livestock production being one of the largest sources of Greenhouse Gas (GHG) emissions. According to Ritchie (2019), 26% of the world's GHG emissions originate from food production. Carbon dioxide (CO2), methane (CH1) and nitrous oxide (N₂O), among others, are the main greenhouse gases.

OBJECTIVES

- Determine the effect that livestock farming has on climate change.
- Analyze different ways to mitigate livestock farming emissions.

RESULTS

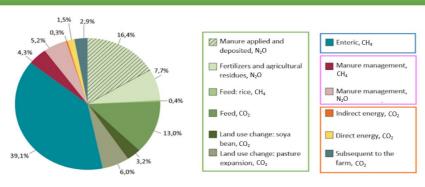
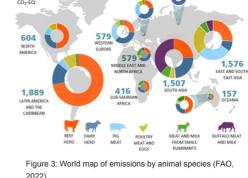


Figure 1: Categories of global emissions from animal production chains (Gerber et al., 2013)



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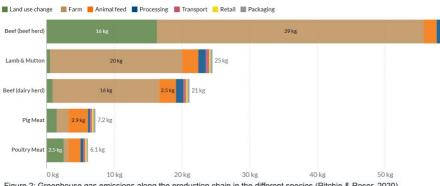
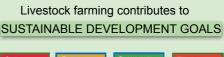


Figure 2: Greenhouse gas emissions along the production chain in the different species (Ritchie & Roser, 2020).

















MITIGATION STRATEGIES

Improvement in animal feeding practices by using quality forage and additives such as "Bovaer 10".

Improvement in manure management by decreasing storage time and favoring the formation of a crust.

Improvement in the management of animal production systems by grouping animals by their production phase, making a suitable feed formulation, genetic selection, animal health and good reproductive management.

Legal aid: the objective is to promote the adoption of the improved practices by ensuring their efficiency and creating financial incentives.

Various international initiatives such as the AnimalChange project, Food2030 or the United Nations Framework Convention on Climate Change (UNFCCC) do already support sustainable adoptions.

CONCLUSIONS

- Livestock is an essential economic activity.
- Livestock contributes enormously to climate change.
- Immediate measures must be taken:
 - Obtain much more productive animals.
 - Reduce the consumption of animal products.

REFERENCES

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