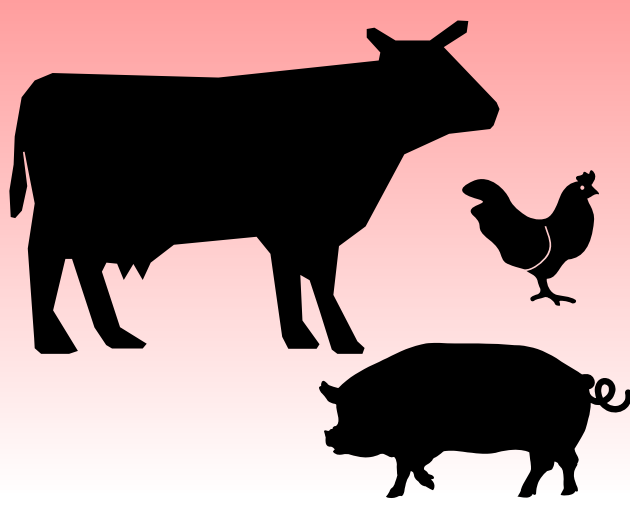


Livestock's Environmental Impact



Introduction

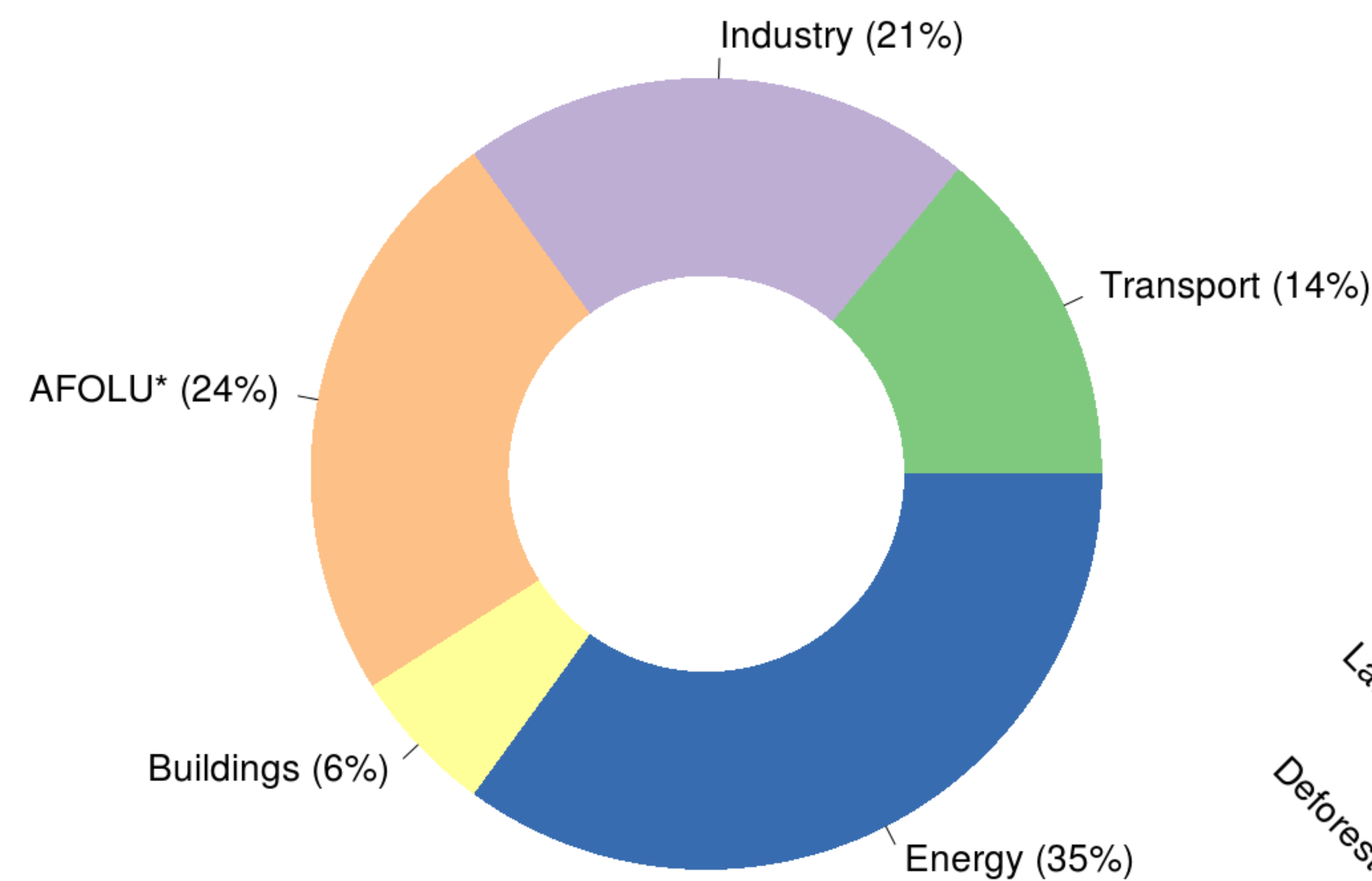
To date, attention in climate protection has focused primarily on power plants and transportation. However according to the United Nations, livestock farming alone is responsible for almost 15% of the problem.

The issue has long been discussed at UN level. The Food and Agriculture Organization (FAO) estimated back in 2008 that industrial livestock farming is one of the two to three most important causes of the biggest environmental problems (<https://bit.ly/1gCIHQE>):

- climate change,
- extinction of species,
- land degradation and
- water scarcity.

This poster is intended to shed light on some of these aspects.

Sector Contributions to Climate Change



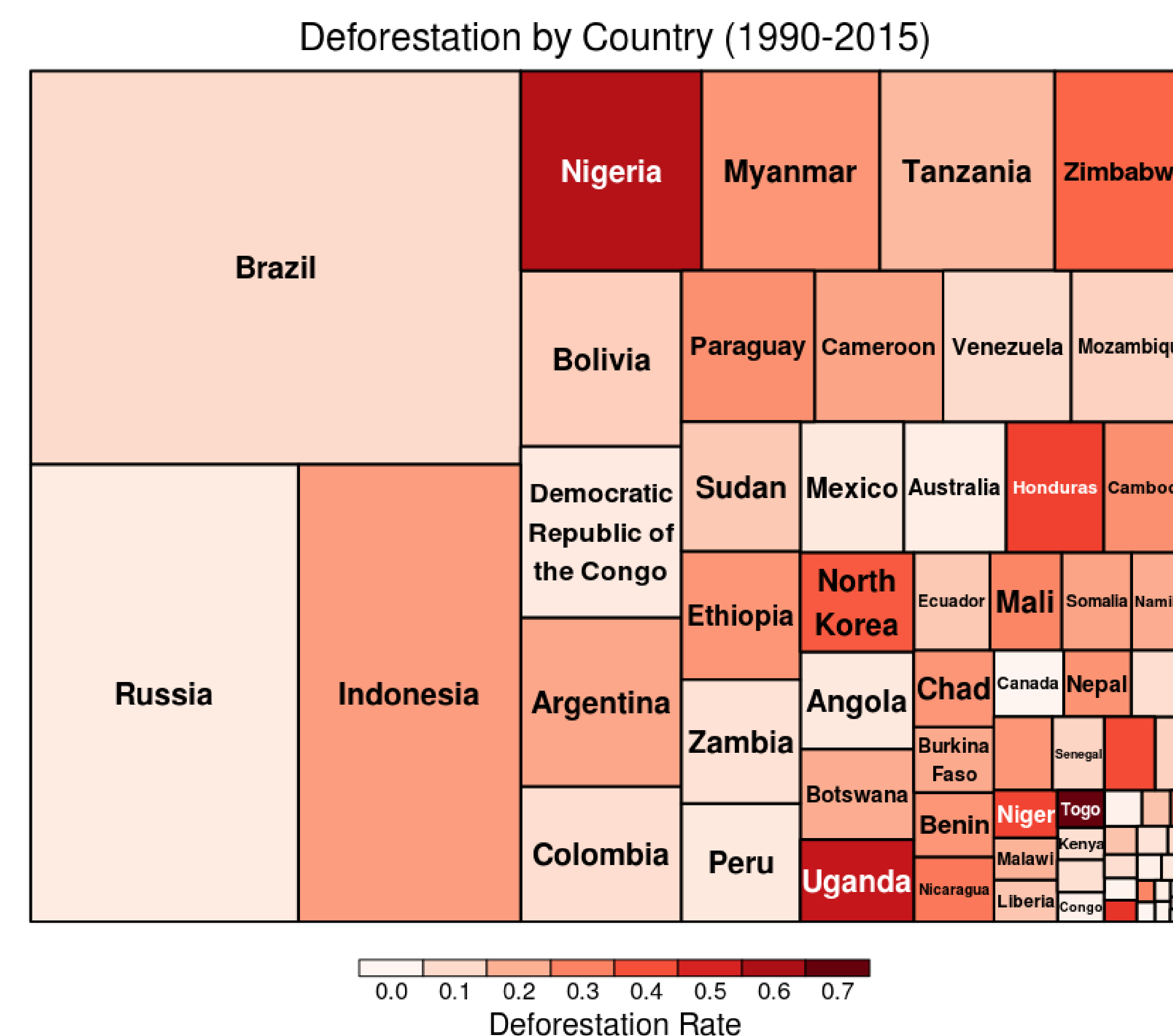
*Agriculture, Forestry and Other Land Use

Data source: FAO, 2016 (<https://bit.ly/2uM9fsX>)

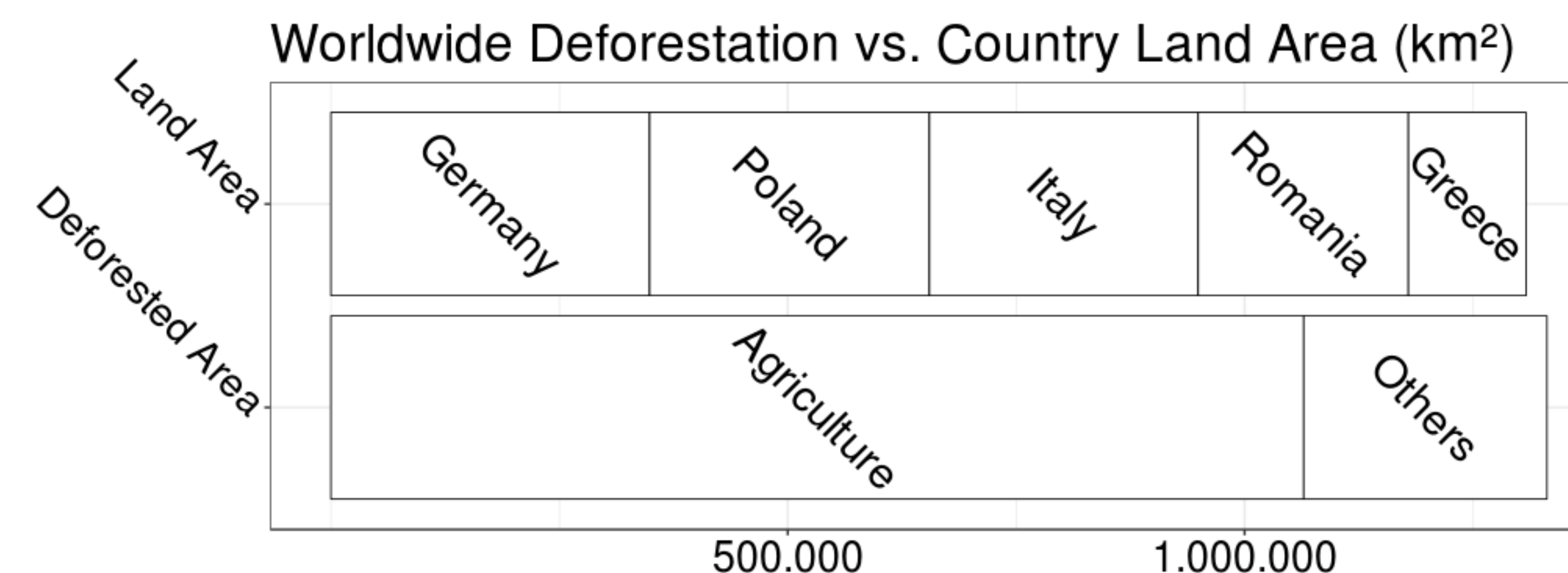
Deforestation

The grouping of agriculture, forestry and other land use (AFOLU) implies that there is a strong relationship between them. And indeed agriculture is estimated to be responsible for around 80% of deforestation worldwide. (<https://bit.ly/2jazipU>)

Let's examine where this is happening and to what extend, based on data of forest area from 1990 till 2015.



Since 1990 a total of **1.330.938 km²** of forest have been destroyed worldwide! Here's a comparison to the total land area of some European countries:

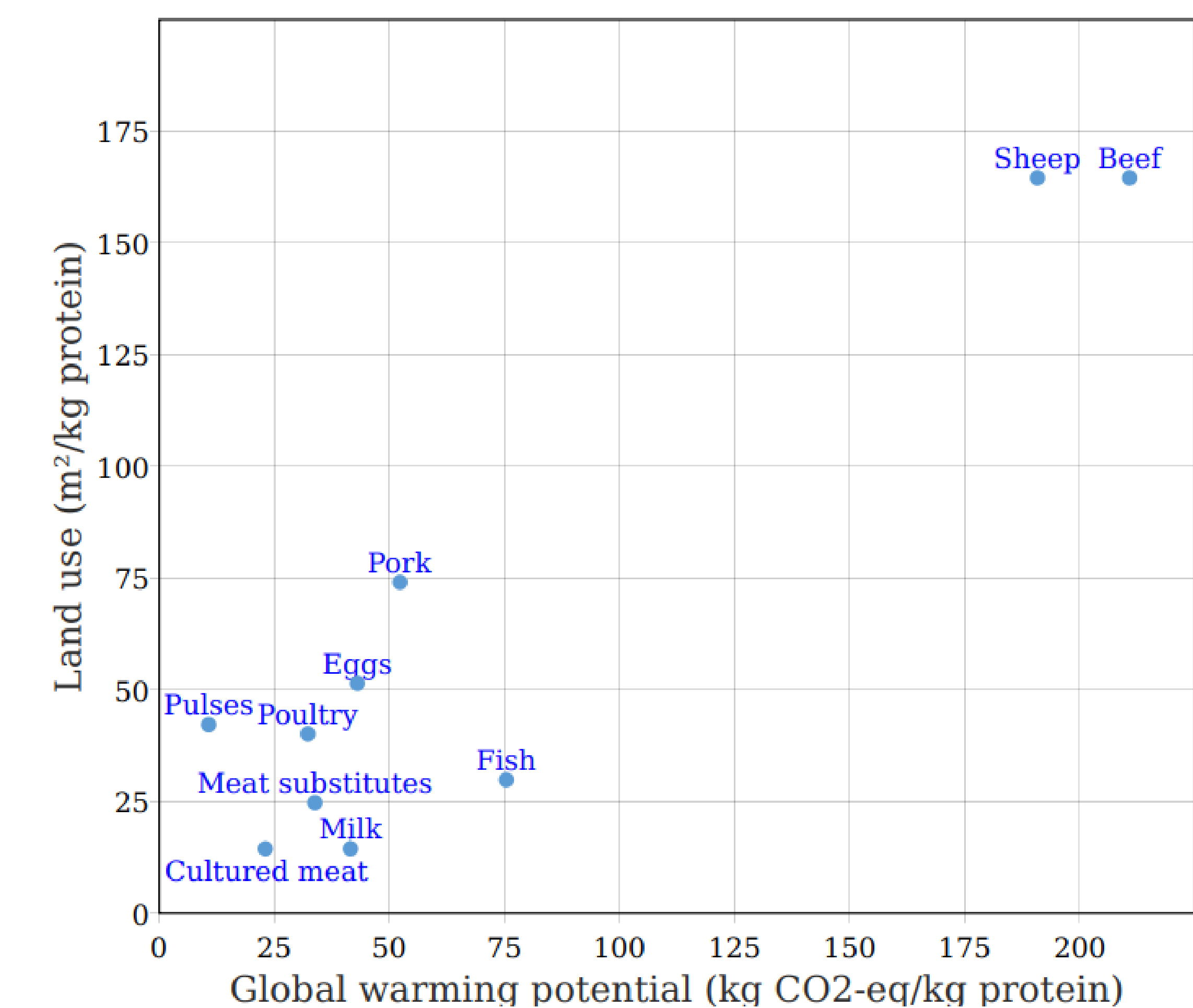


Data sources: FAO, 2016 (<https://bit.ly/2LvU91Q>) and World Bank, 2017 (<https://bit.ly/2zW0nXK>)

GHG Emissions and Land Use

Research on the environmental benefits of cultured meat predicts figures visualized in the following diagram. The numbers are on a relative scale with regards to the produced amount of protein, which makes them well comparable. Besides different types of meat also plant based sources are being considered.

GHG Emissions vs. Land Use of different Protein Sources



Data source: LCA Food, 2014 (<https://bit.ly/2BHBCex>)

Conclusions

- Livestock farming is a major driver of climate change, especially beef.
- In addition to the high GHG emissions, it also contributes to deforestation on a large scale, which further increases its impact.
- Cultured meat could be an environmental friendly alternative, but the production industry doesn't yet exist.
- Plant based diets are the most environmental friendly alternative, that is immediately available.