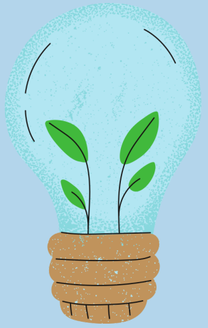
TEAM EARTH

JPMORGAN CHASE & CO

Data for Good

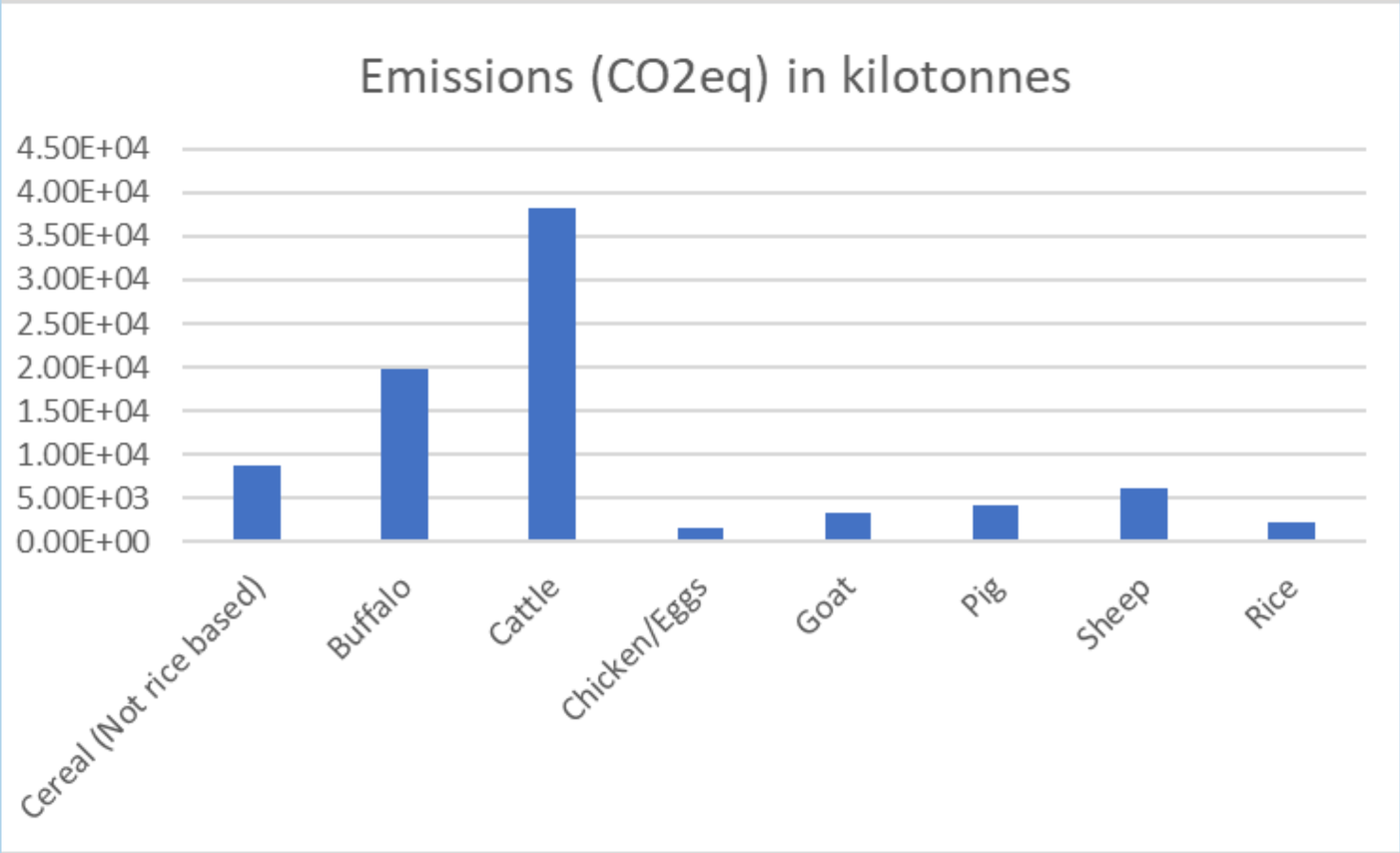


Overview

U.S. IMPORTERS HAVE THE POWER TO IMPROVE THE LIVES OF THOSE IN UNDERDEVELOPED COUNTRIES

Which agricultural products to focus on?

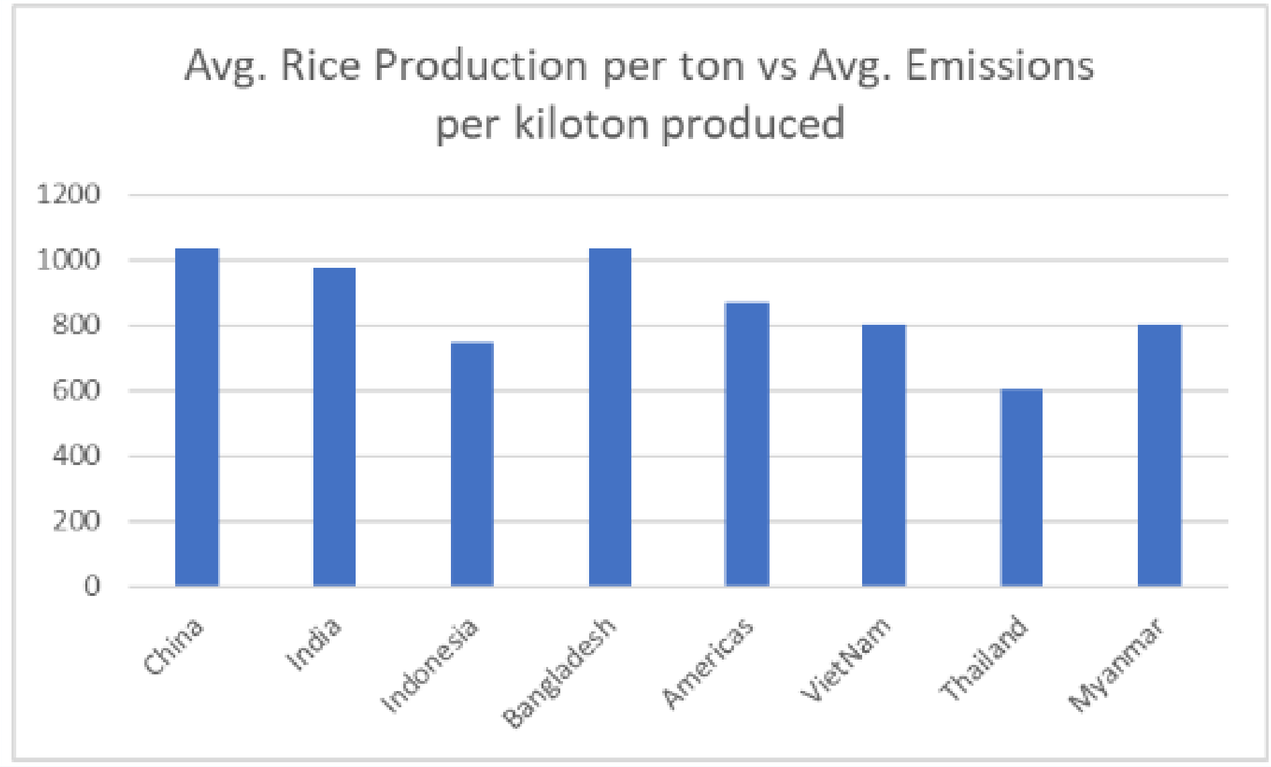
- **Focus on the most efficient product to produce**
  - **Animal agriculture produces nearly 60% of agriculture emissions, and agriculture produces 35% of all global greenhouse emissions**
    - **Though Chicken/Eggs produces less emissions than rice, meat still pushes higher emissions overall**



https://www.commondreams.org/news/2021/09/13/animal-agriculture-emits-nearly-60-greenhouse-gases-food-production-study

Maximizing Social Good and Minimizing Environmental Costs

- **Conclude: Bangladesh provides the best bang-for-the-buck with respect to most rice produced per kiloton of emissions**
- **Bangladesh also has 24.3% below the poverty line, the major social benefit of importing from them**
- **Another country to import from that has a high unemployment rate is India, with a rate of 21.9%. India's biggest product by count is greasy wool**



OUR GOAL?

Analyze the correlation between investment, expenditure, and environmental impact

Step 1

Data Wrangling

-Clear irrelevant data
-Categorize the data we want to focus on

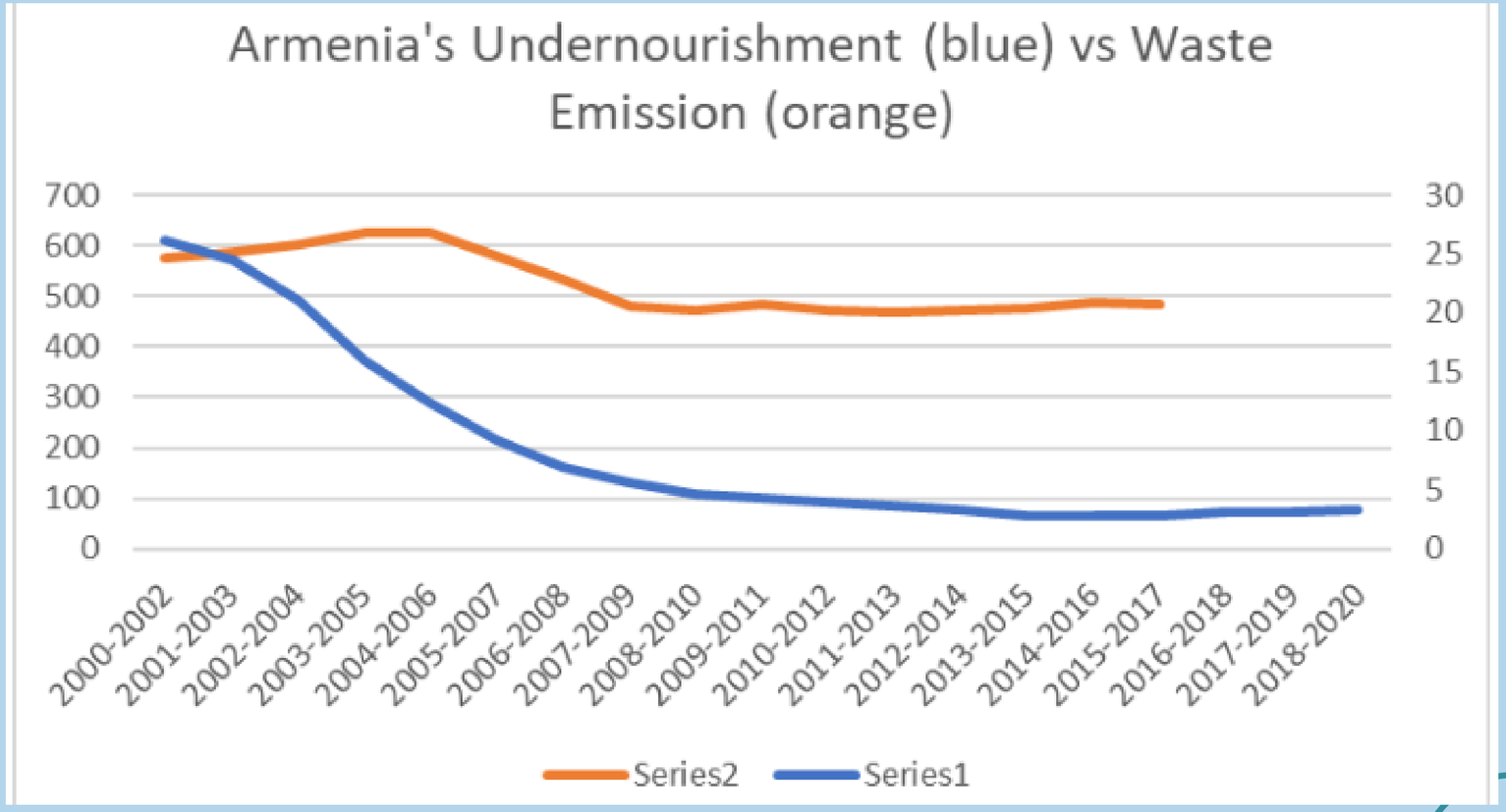
Step 2

Statistics/Graphs

-Perform exploratory data analysis
-Any interesting results? outliers?

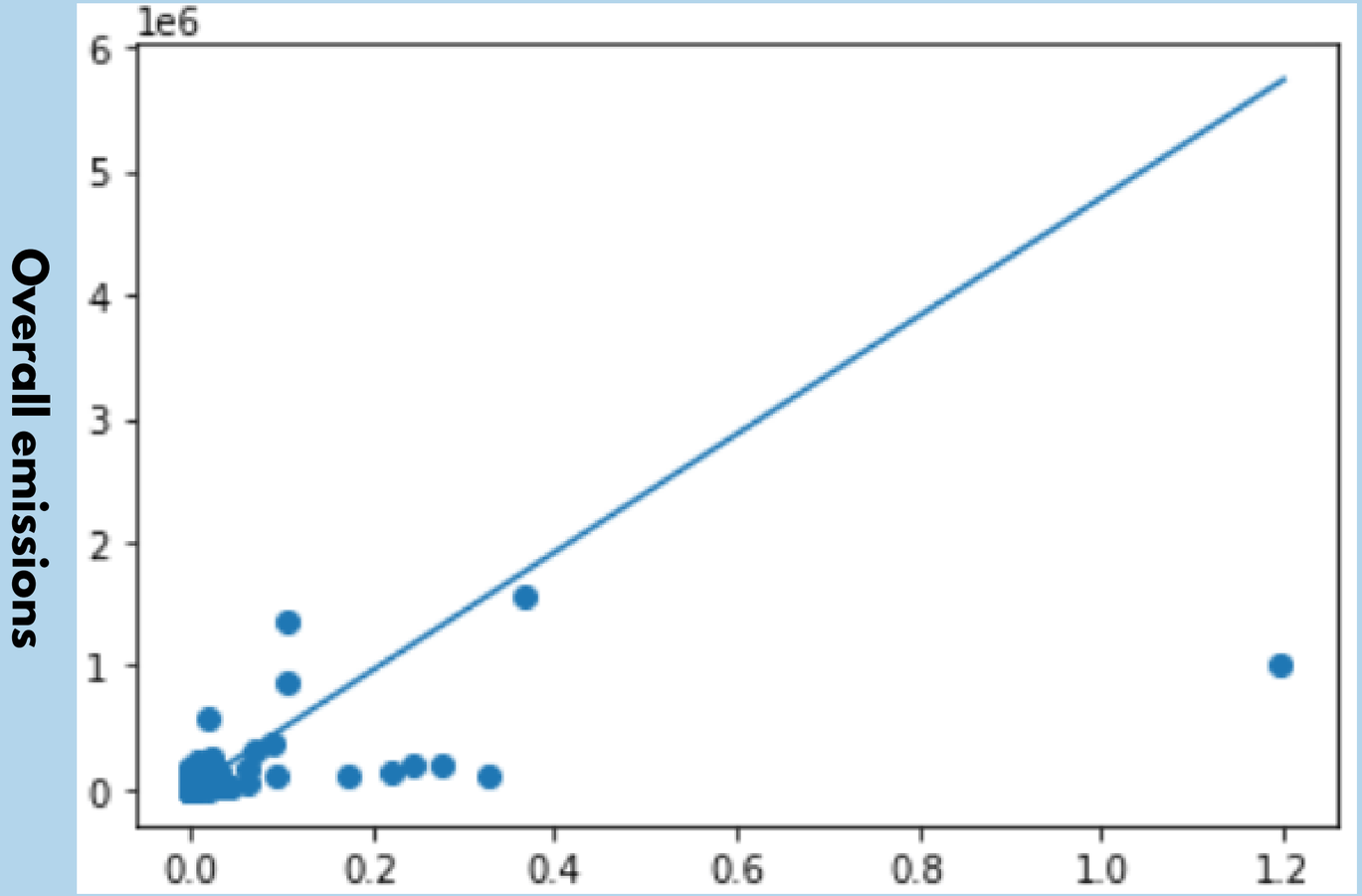
EDA: Poverty Rates

Conclusion: Nourishment and Greenhouse Gas Emissions have little correlation

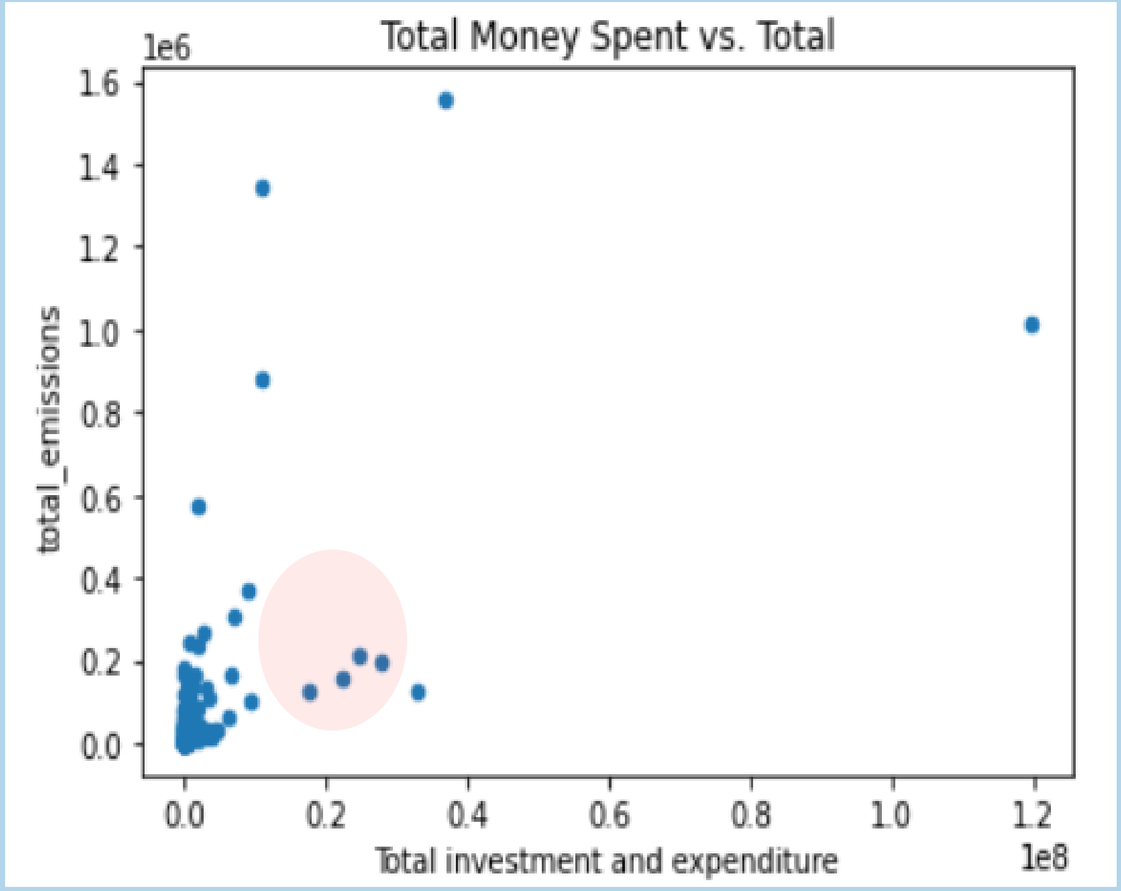


Investment and Expenditure in Agriculture Correlation

Linear regression of:



Correlation between total spent vs Emissions



Area	total_emissions	Total investment and expenditure
France	212511.675830	2.453386e+07
Germany	198140.520892	2.758196e+07
Italy	121494.397514	1.761178e+07
Japan	126572.572080	3.283319e+07
United Kingdom of Great Britain and Northern Ireland	154297.105394	2.234143e+07

EDA: Emissions