

# CLUSTERING AND FITTING

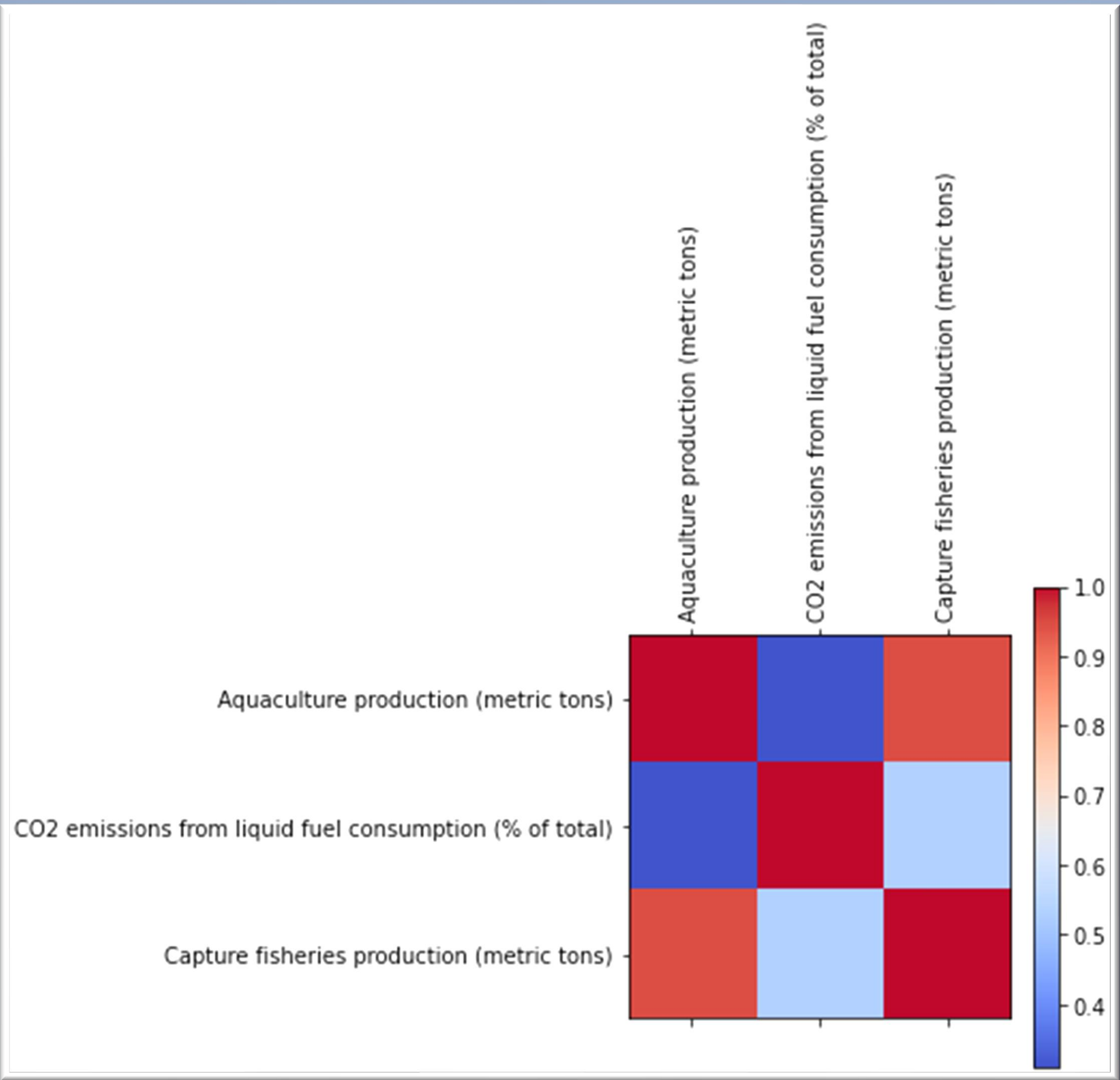
GIT HUB LINK: <https://github.com/Aneenababu123/Cluster-and-fitting>

## INTRODUCTION:

Environmental changes are a major concern in today's world, and there are several factors that contribute to these changes. Two such factors are "Aquaculture production (metric tons)" and "CO2 emissions from liquid fuel consumption (% of total)". In this context, clustering and fitting these two factors can provide insights into how they interact and their combined impact on the environment. By clustering and fitting these factors, we can identify trends and patterns in the data and develop models that can help us understand and predict the impact of aquaculture production and CO2 emissions on the environment.

## ABSTRACT:

- ❖ First graph plots the data of values over the of 1960 to 2016 shows an upward trend.
- ❖ A scatter matrix visualize the pairwise relationships between multiple variables in a dataset.
- ❖ Sum of square error is calculated.
- ❖ Heat map is used to show the correlation between the variables from one country.
- ❖ Clustering is done for the variables.



## CONCLUSION:

In conclusion these two factors, indicating that as aquaculture production increases, so do CO2 emissions from liquid fuel consumption. In conclusion these two factors have a significant impact on environmental changes. The clustering analysis revealed two distinct clusters, with one showing higher levels of aquaculture production and lower levels of CO2 emissions, while the other showed the opposite trend. The fitting analysis showed that there is a strong positive correlation

