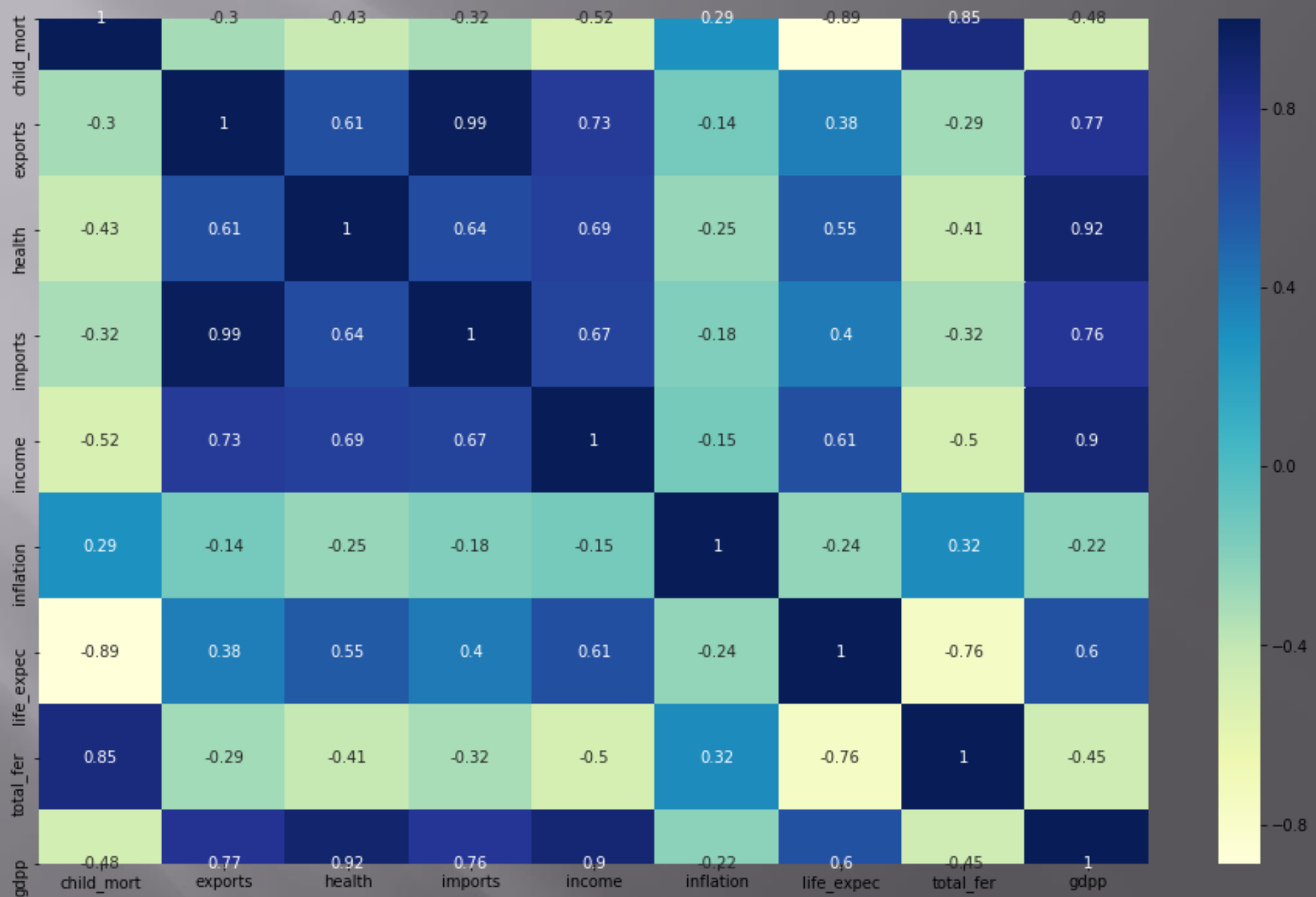


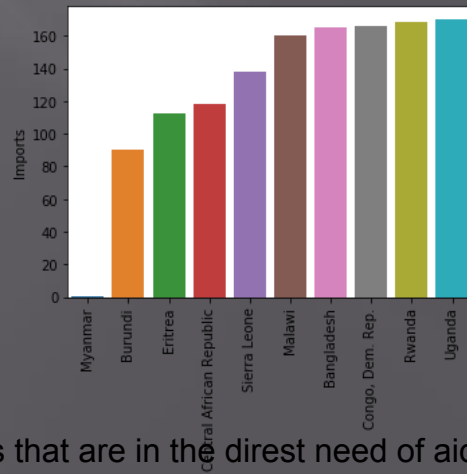
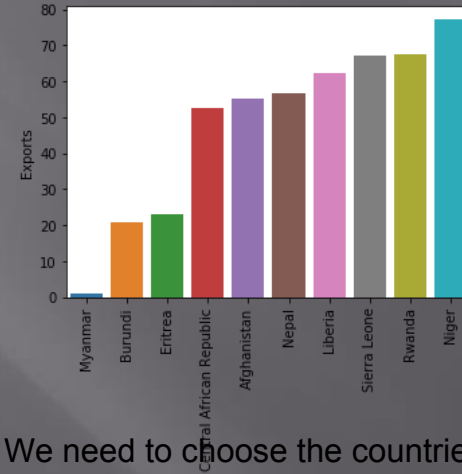
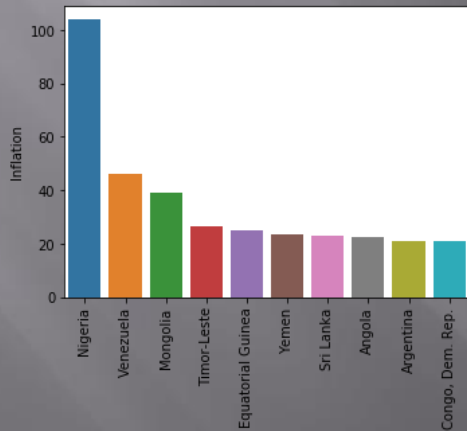
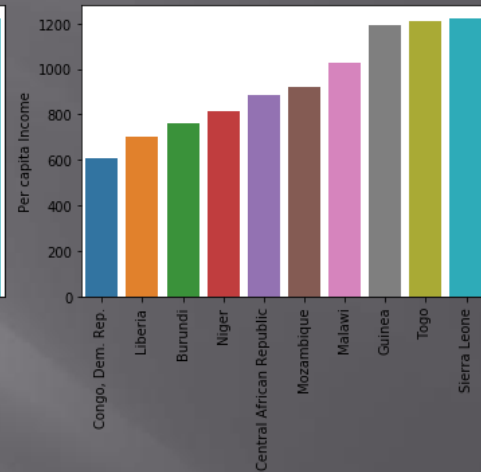
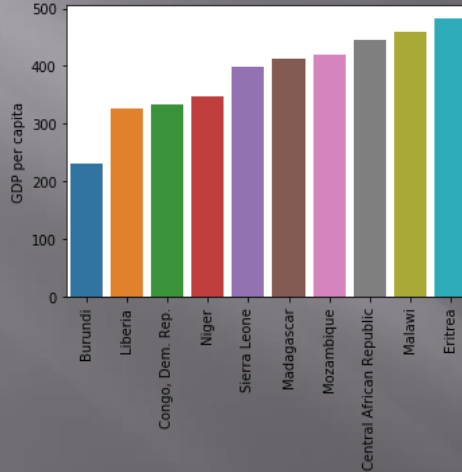
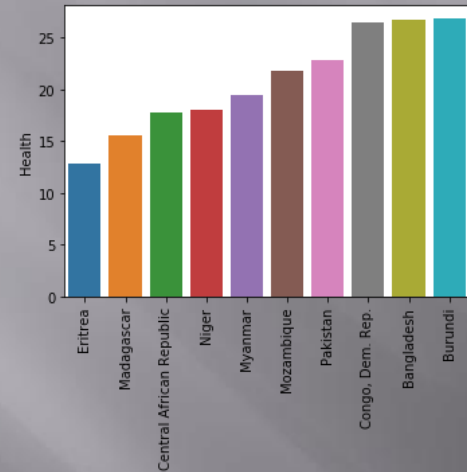
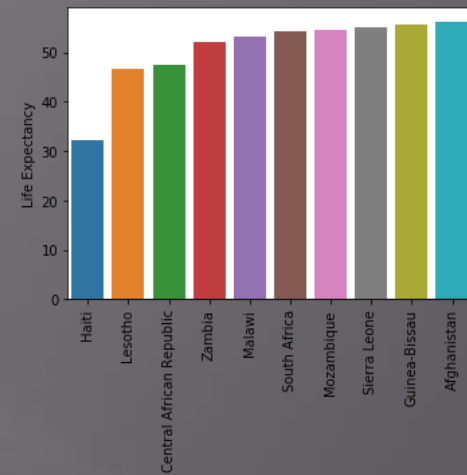
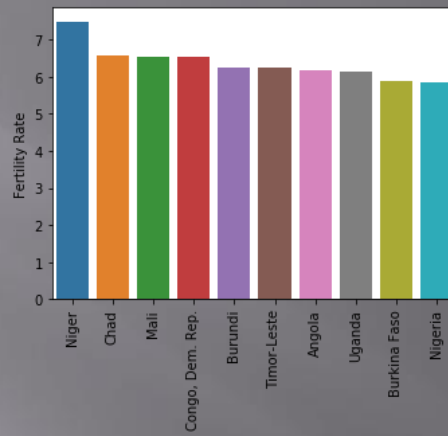
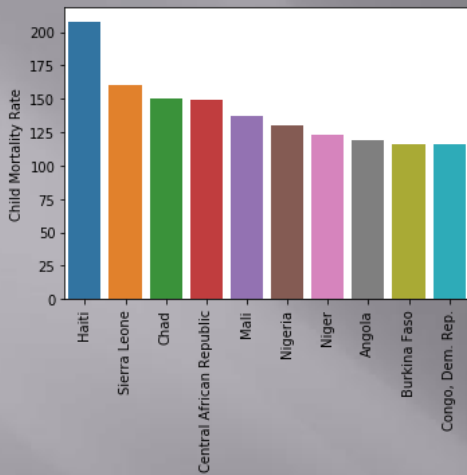
HELP NGO STUDY

Business Objectives

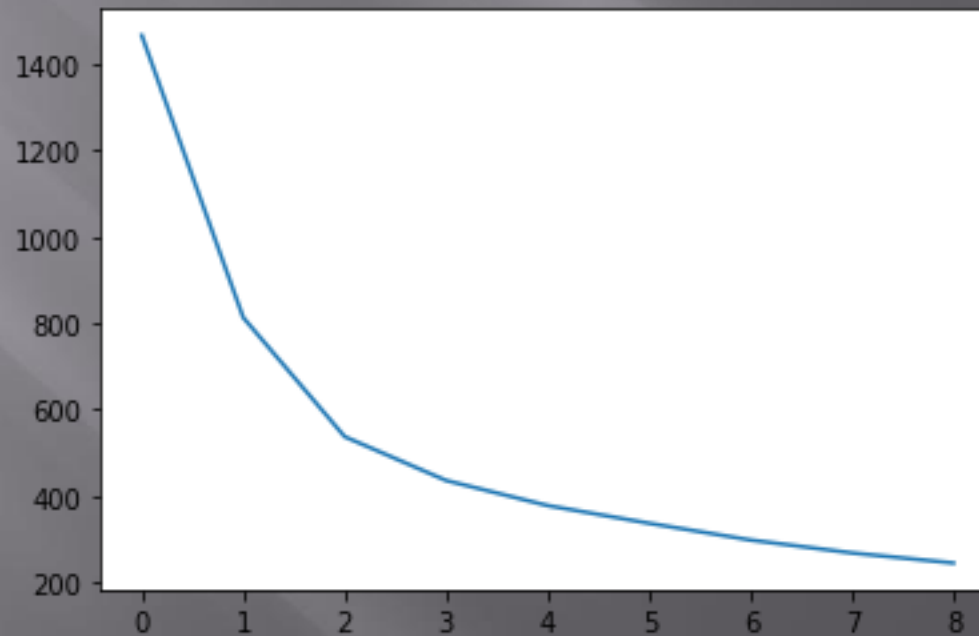
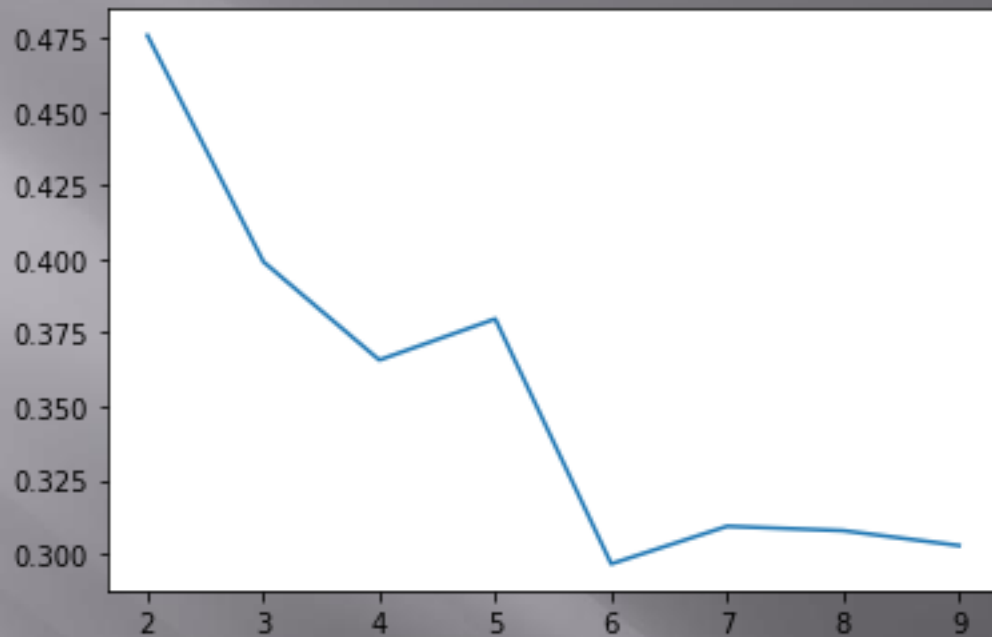
HELP International is an international humanitarian NGO that is committed to fighting poverty and providing the people of backward countries with basic amenities and relief during the time of disasters and natural calamities. The job is to categorise the countries using some socio-economic and health factors that determine the overall development of the country and we need to suggest the countries which the CEO needs to focus on the most.



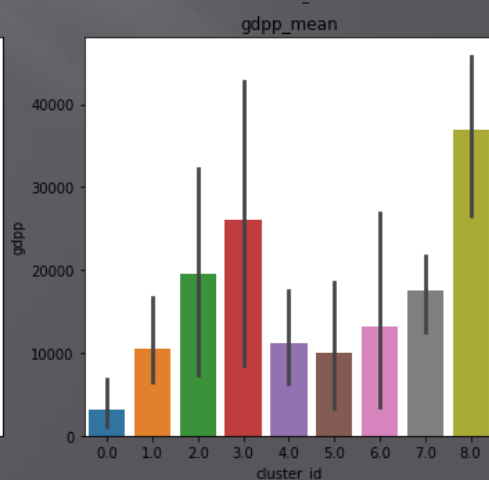
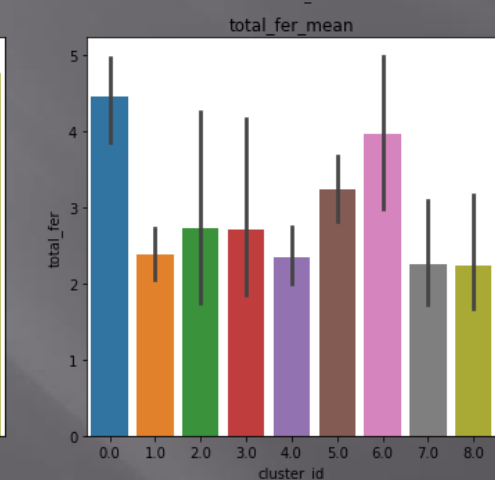
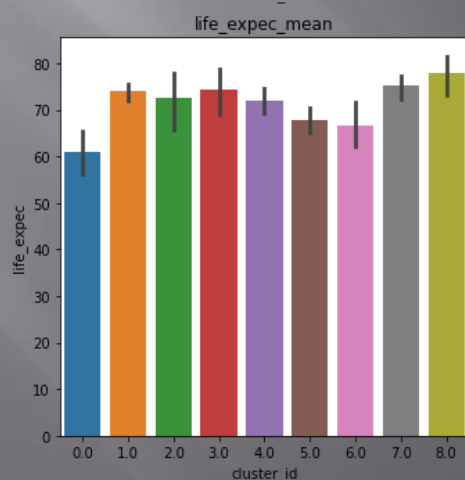
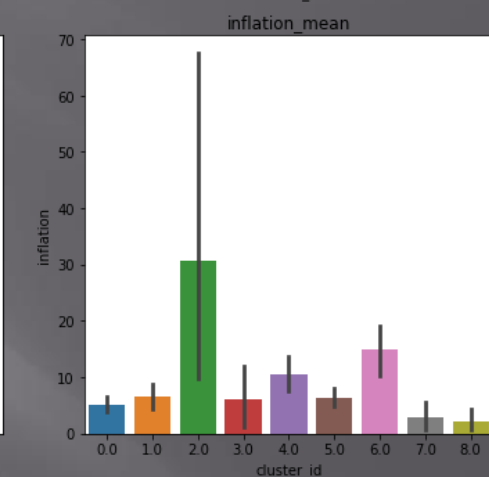
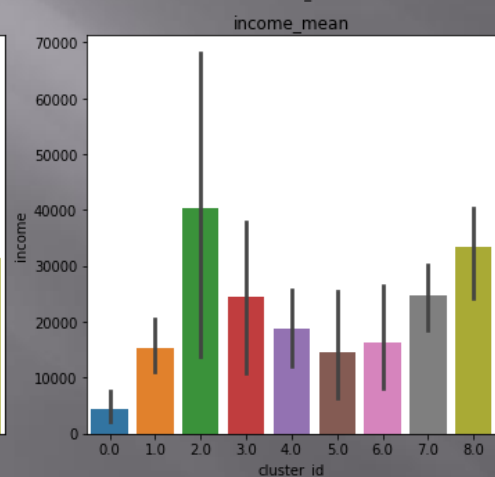
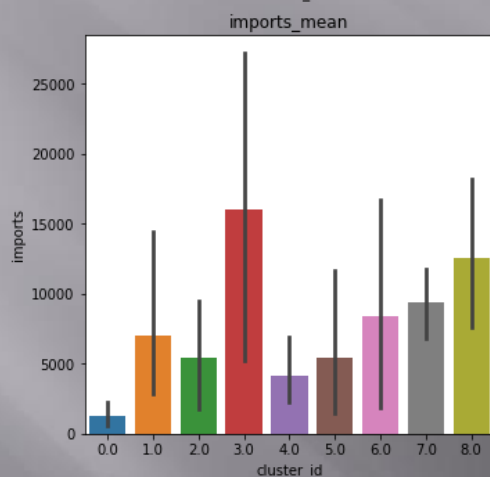
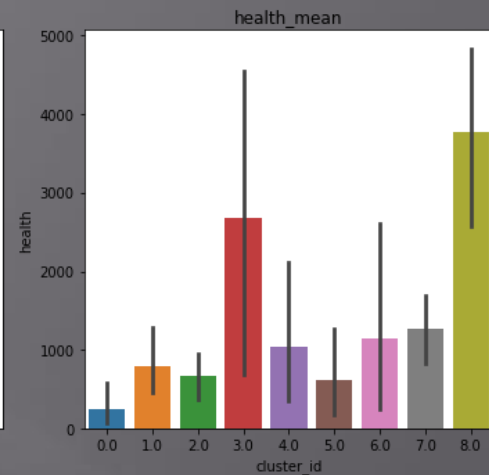
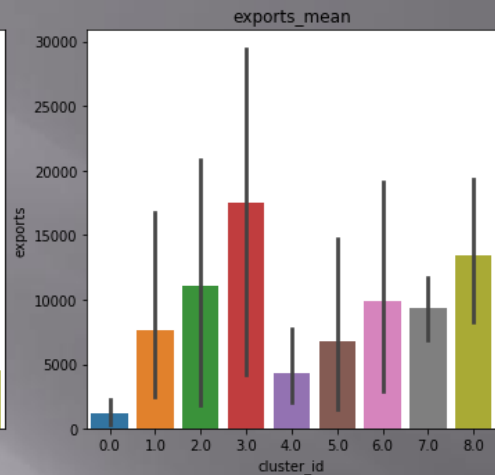
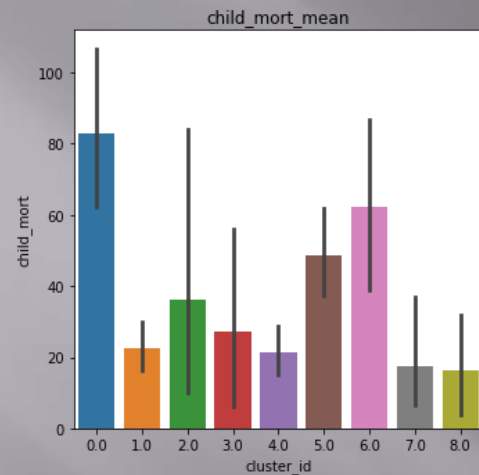
Correlation in data : Looking at heat map we can see that child mort& total fert , import & export and income & gdpp has highest correlation



Lowest 10 countries for each factor - We need to choose the countries that are in the direst need of aid.

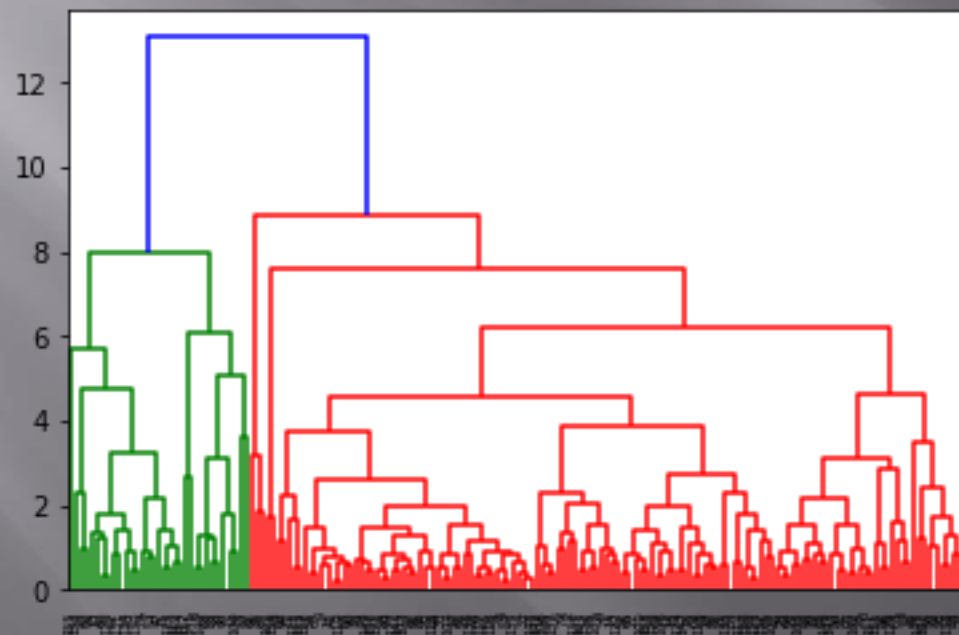
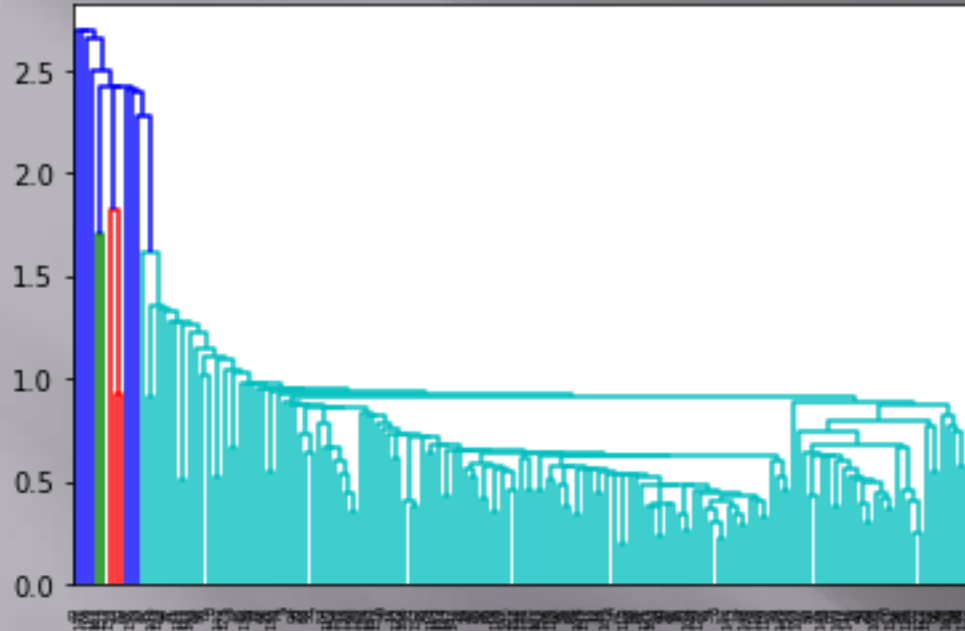


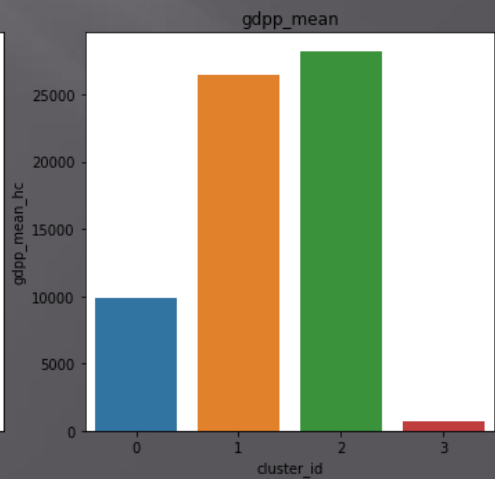
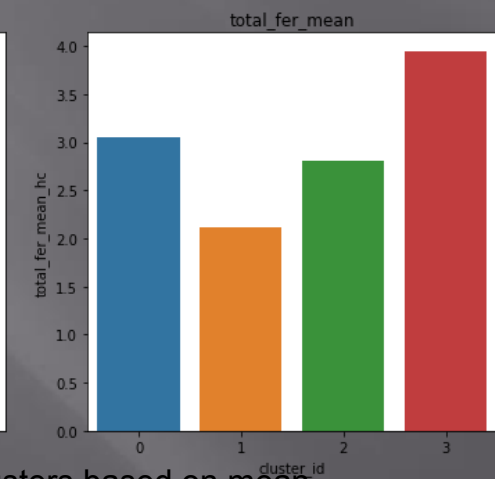
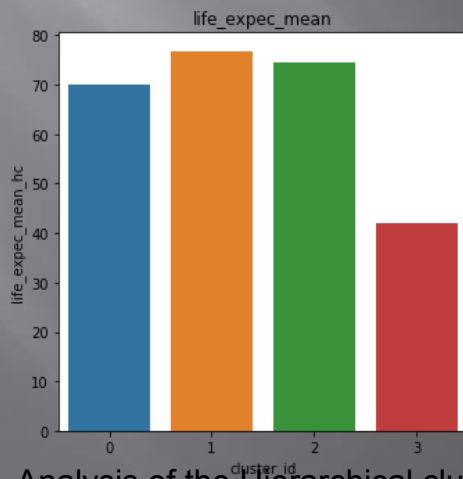
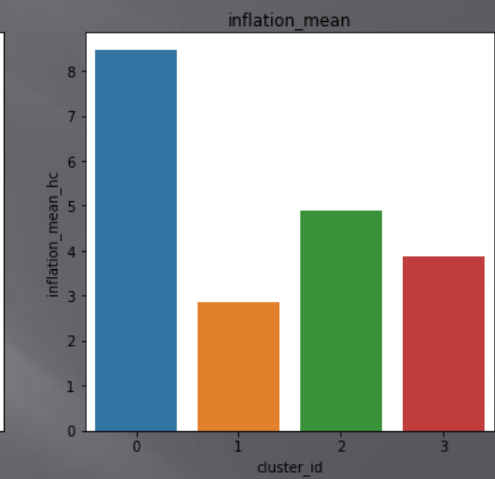
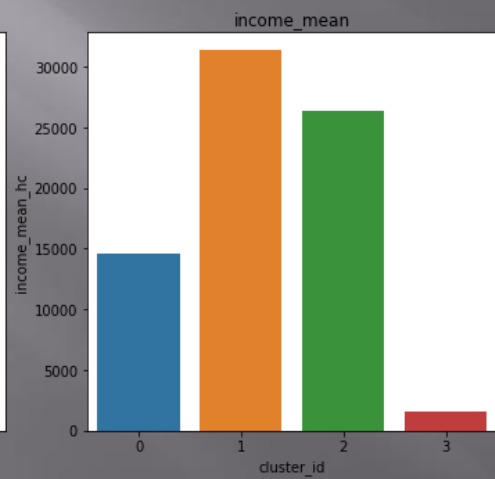
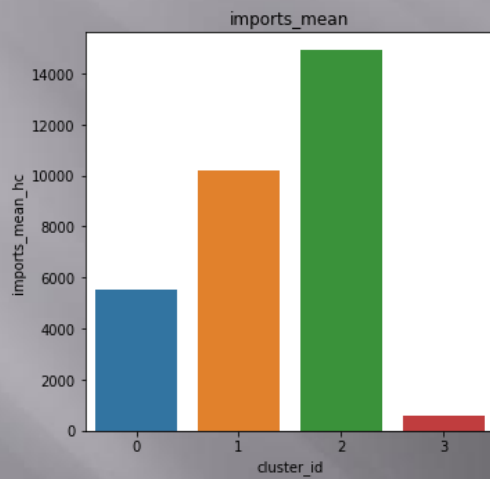
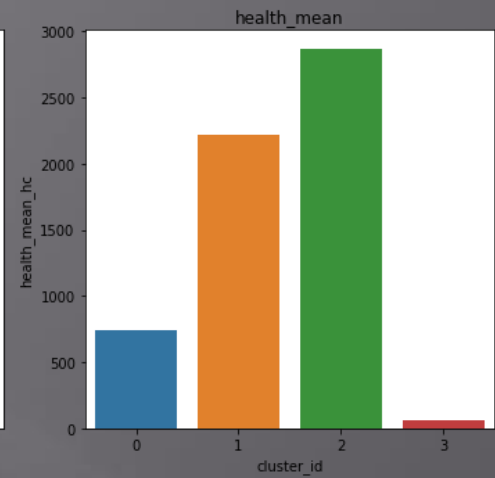
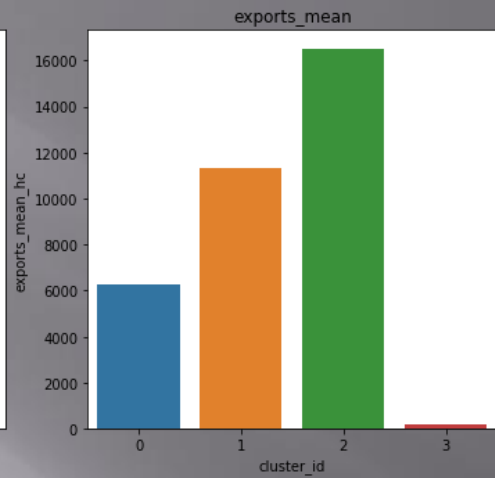
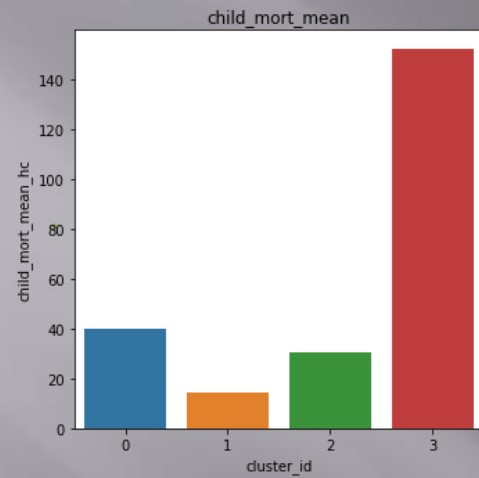
Silhouette Analysis and Elbow curve - Looking at curve we can see elbow at range 3. So, taking k value as 3.



As per K-Means Clustering, top 5 countries which require aid are:

1. Burundi
2. Liberia
3. Madagascar
4. Central African Republic
5. Guinea-Bissau





Analysis of the Hierarchical clusters based on mean

As per Hierarchical Clustering, the countries which require aid are:

1. Burundi
2. Liberia
3. Congo, Dem. Rep.
4. Sierra Leone
5. Madagascar

Thank You!!!