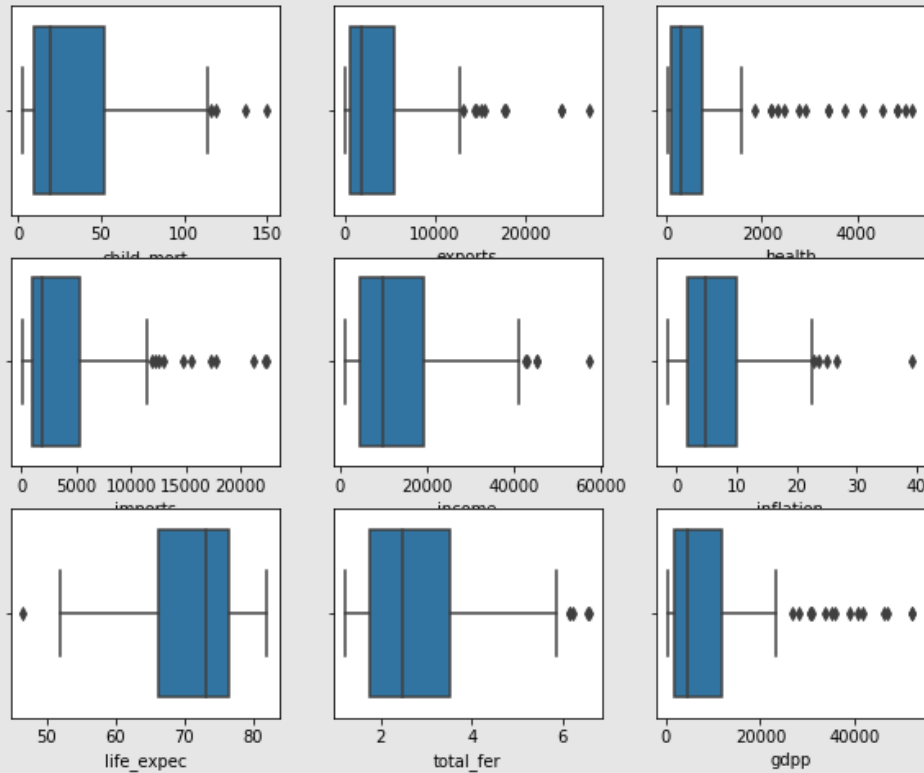# COUNTRIES

Direst need of aid

Factors affecting :

- In the data set that is used we started with around 167 countries.

- During the data checks and treating the data to apply different machine learning techniques we were left with 133 countries.

- As we need soft treatment on multiple factors to remove outliers.

- We checked the countries on factors like child_mort , exports,health, imports,income, inflation,life_expec,total_fer and gdpp.
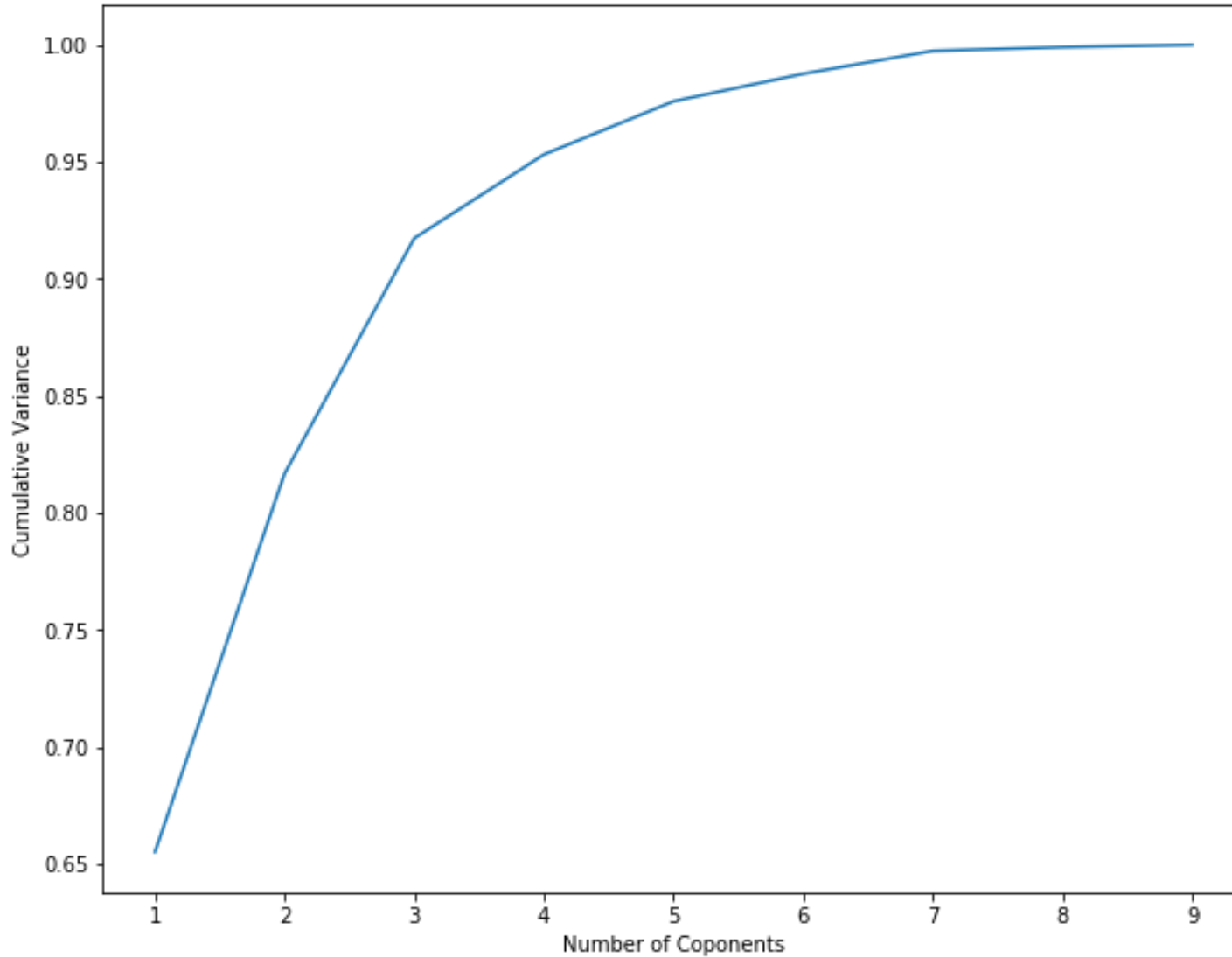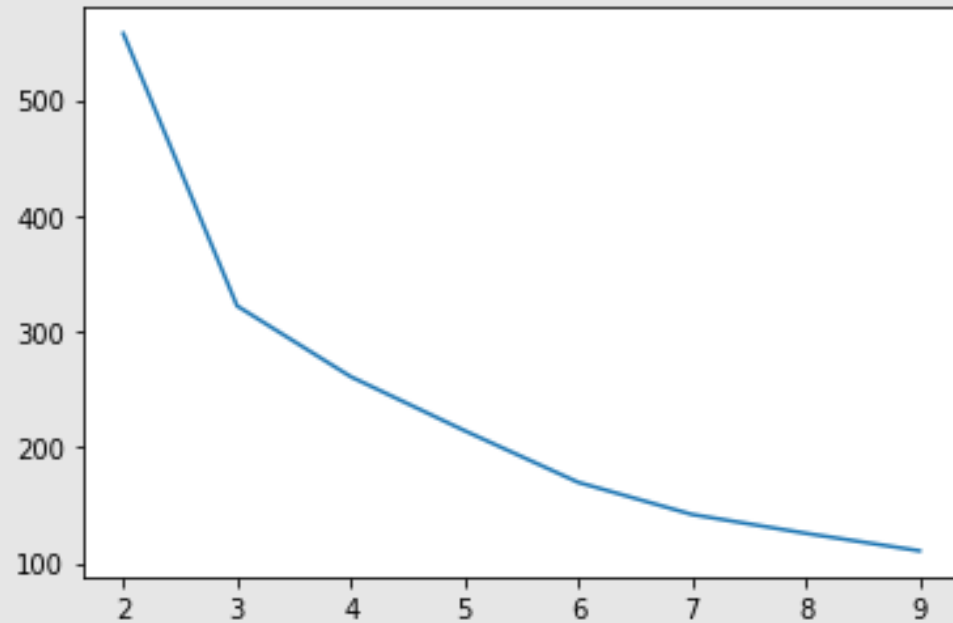
Use of PCA technique for dimension reduction:

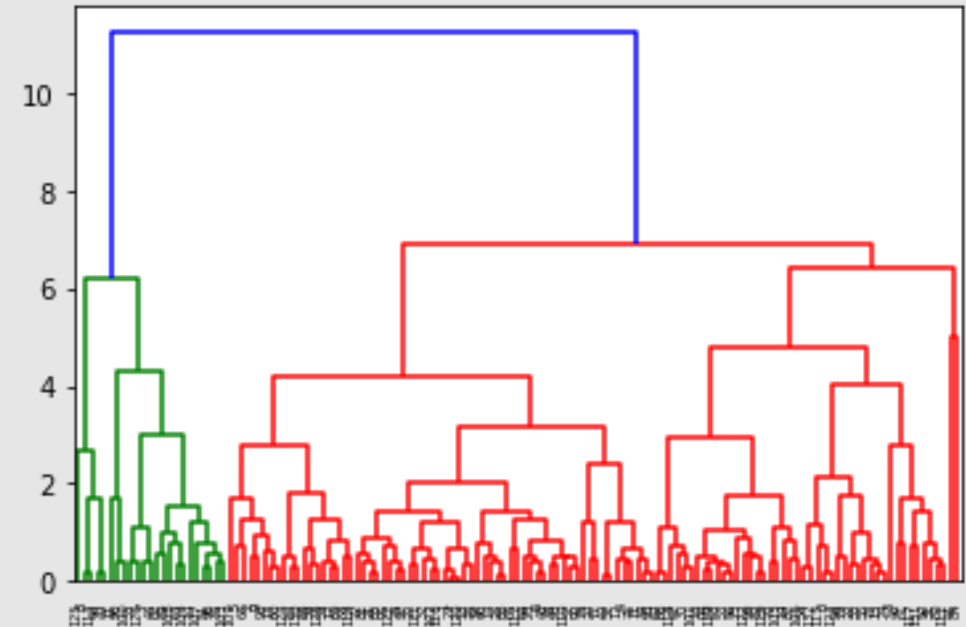-This helped us in reduction of components without losing the information.

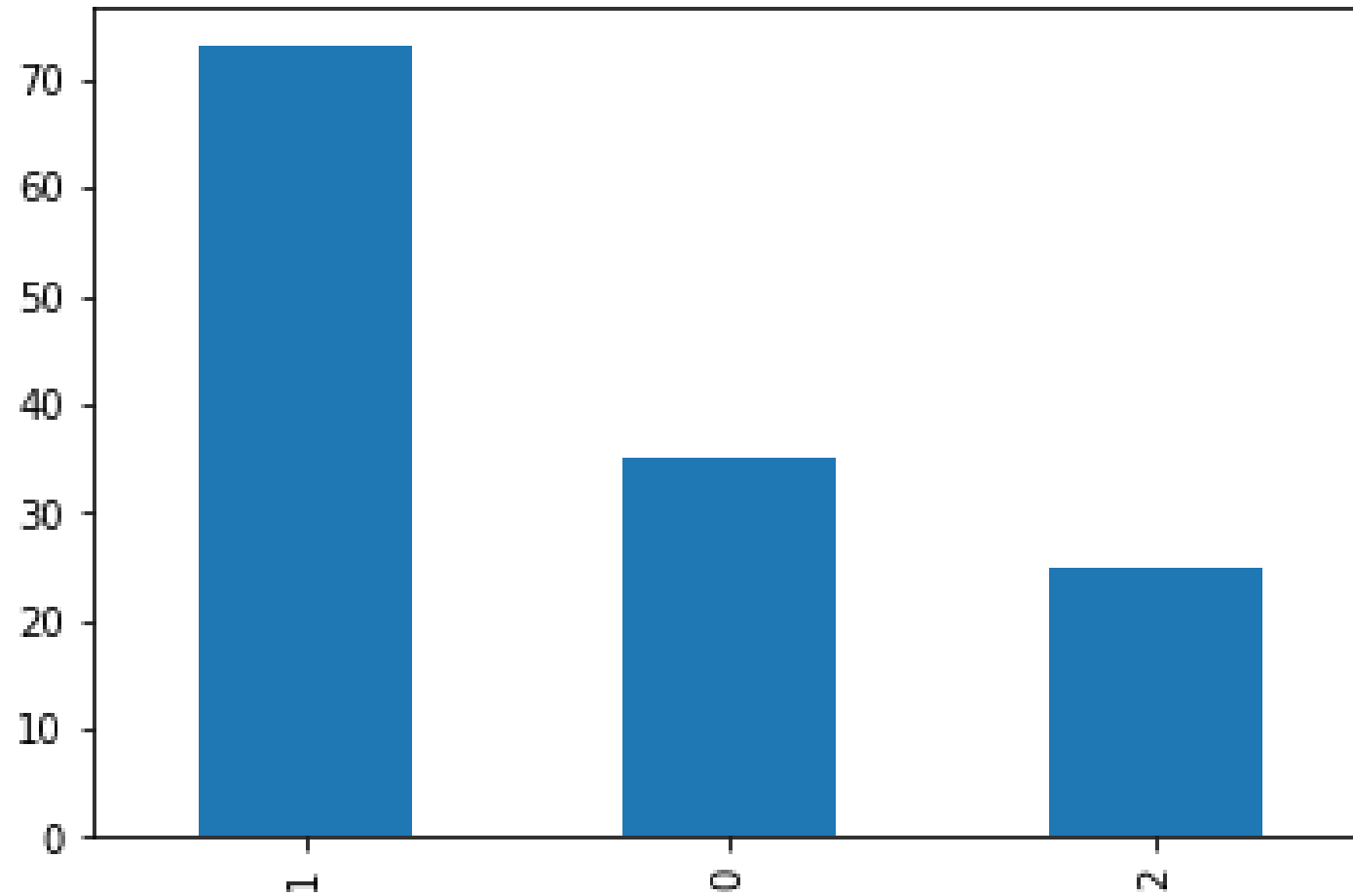- We just used three components as it covered more than 90% data with it.

Clustering Technique used:
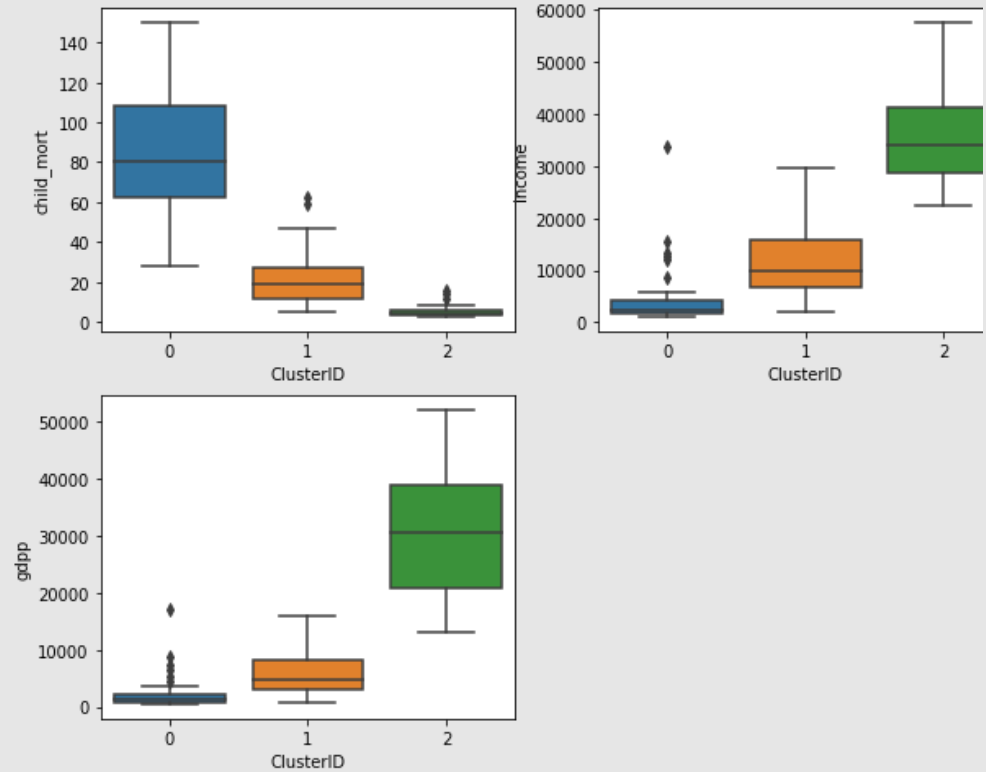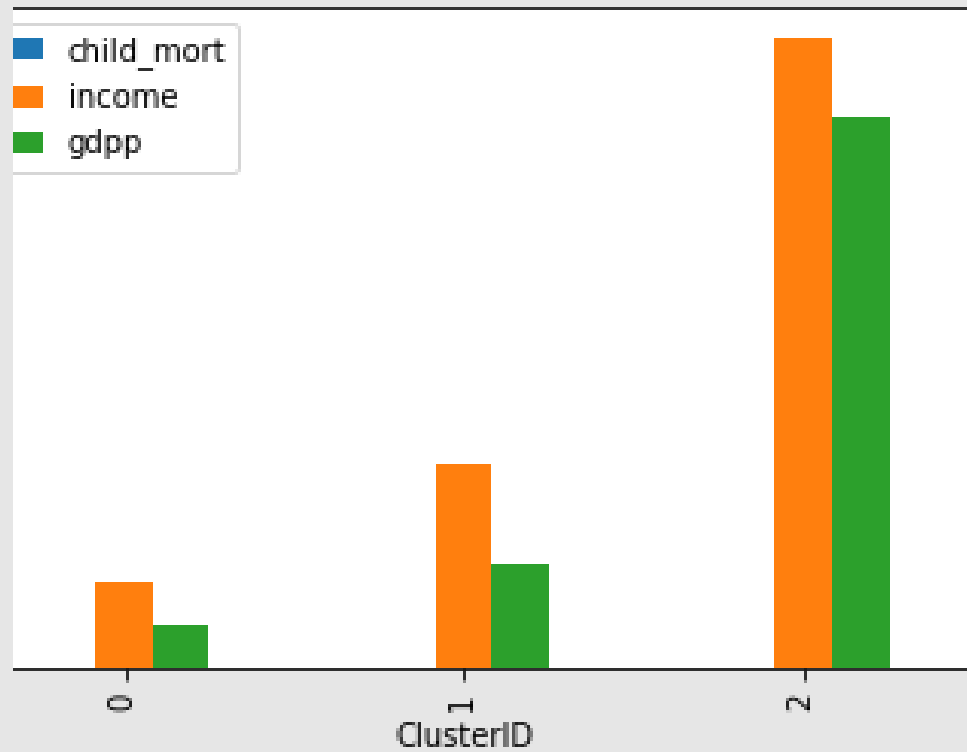
KMeans Clustering

Hierarchical **clustering**.

Used 3 Clusters in both methods :

-Each cluster containing group of countries whose position is near to each other.

-Highest number of countries were in Cluster 1.

Impact of GDPP,Income and child mort on each cluster (cont.)

Impact of GDPP,Income and child mort on each cluster (cont.)

We can say the following about each cluster wrt to other clusters:

Cluster 0 : Highest Child mortality , lowest income and lowest gdpp

Cluser 1: medium child mortality , midium income and midium gdpp

Cluster 2: Lowest child mortality , highest income and highest gdpp.

Cluster 0 : Countries in need of aid

Using both clustering methods we go around 35 countries in cluster 0.

Then on basis of high child mortality , lowest income and lowest gdpp we found 5 countries that need the aid most that is :

1.Guninew-Bissau

2.Burkina Faso

3.Guinea

4.Togo

5.Afghanisthan¶

Recommendation :

Child Mortality : c**hild mortality** could be reduced **by** attendance **of** professionals at birth **and by** breastfeeding **and** through access to clean water, sanitation, **and** immunization.

Income : More jobs should be created for poor people and education should be compulsory.

GDPP: Is by increasing economic growth.

THANK YOU

Mohit Yadav