HELP INTERNATIONAL AID PROGRAM

IDENTIFYING THE COUNTRIES IN DIRE NEED OF AID

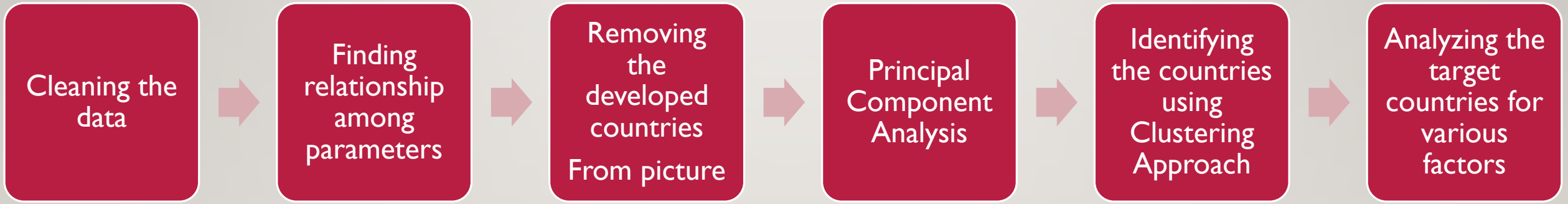
ABHINAV SHARMA

PROBLEM STATEMENT

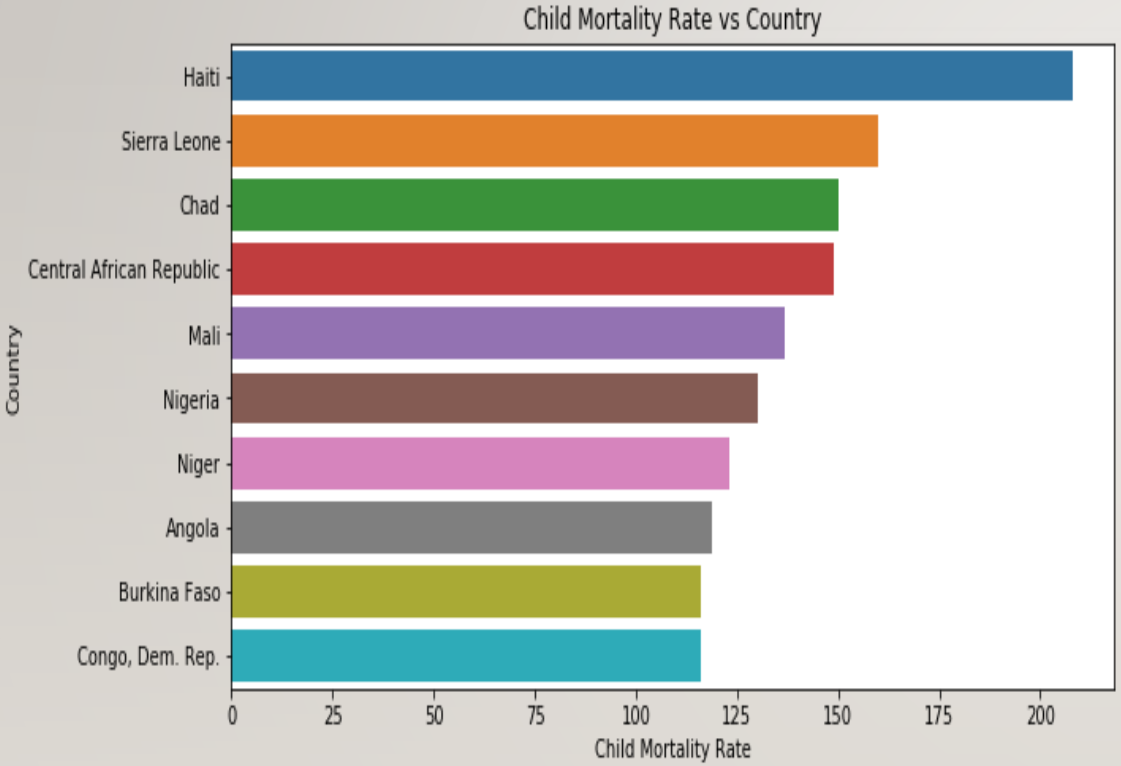
- Identifying the countries which are in direst need of aid and can be supported with the funds gathered via recent funding programs.

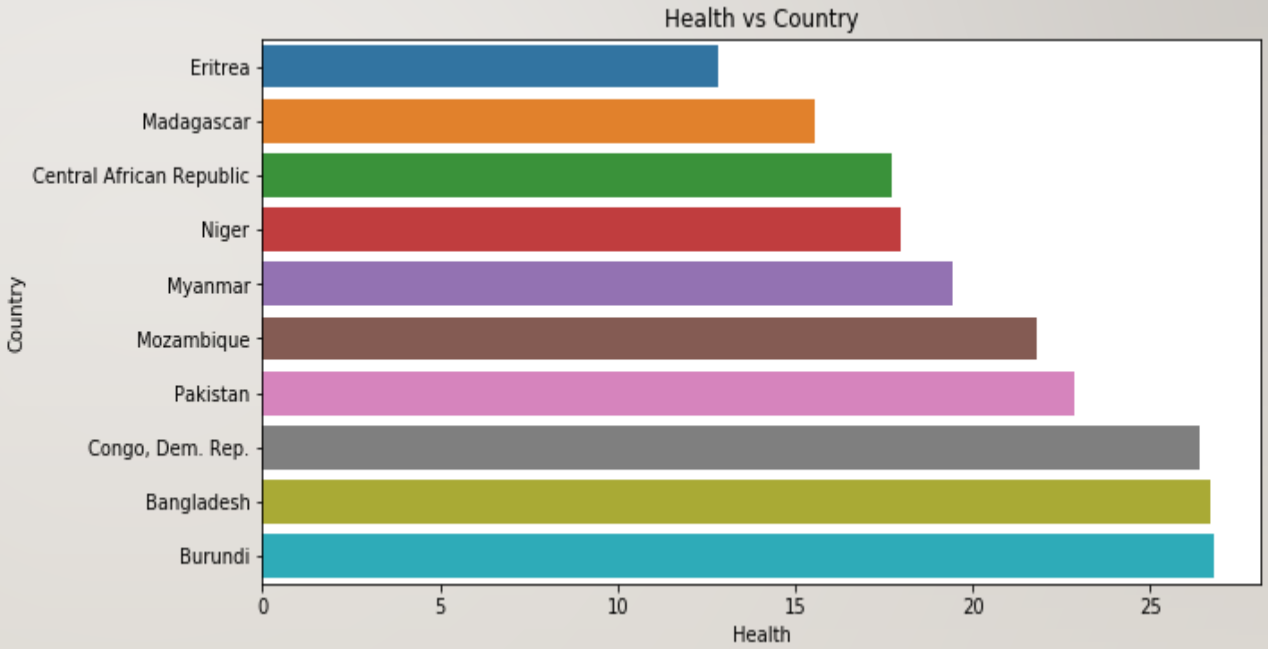
- Categorize the countries using some socio-economic and health factors that determine the overall development of the country and then suggest the countries for help.

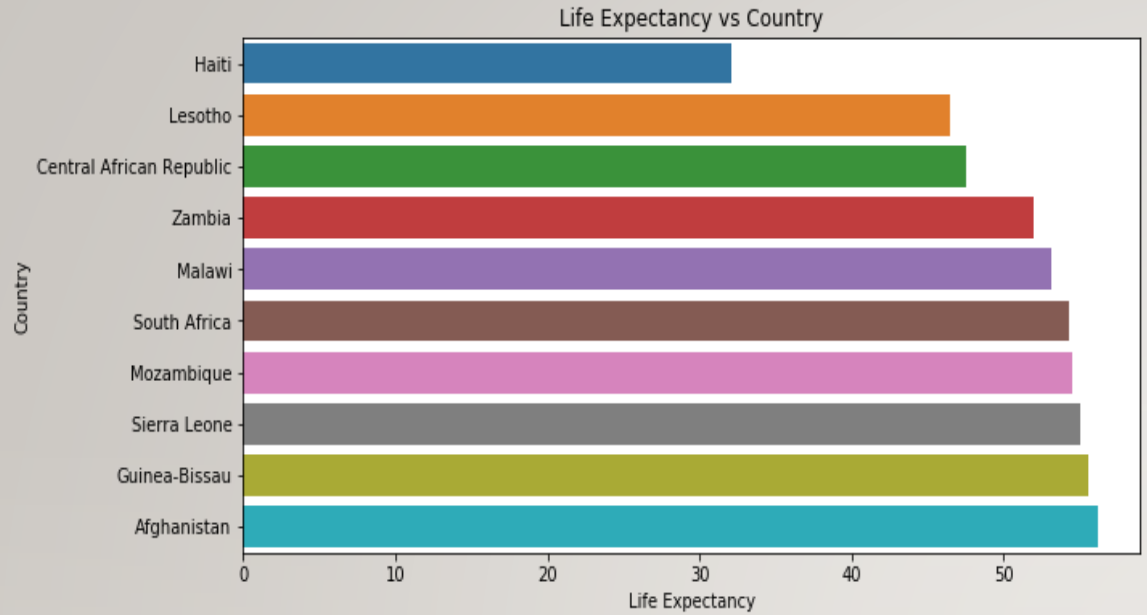
ANALYSIS APPROACH

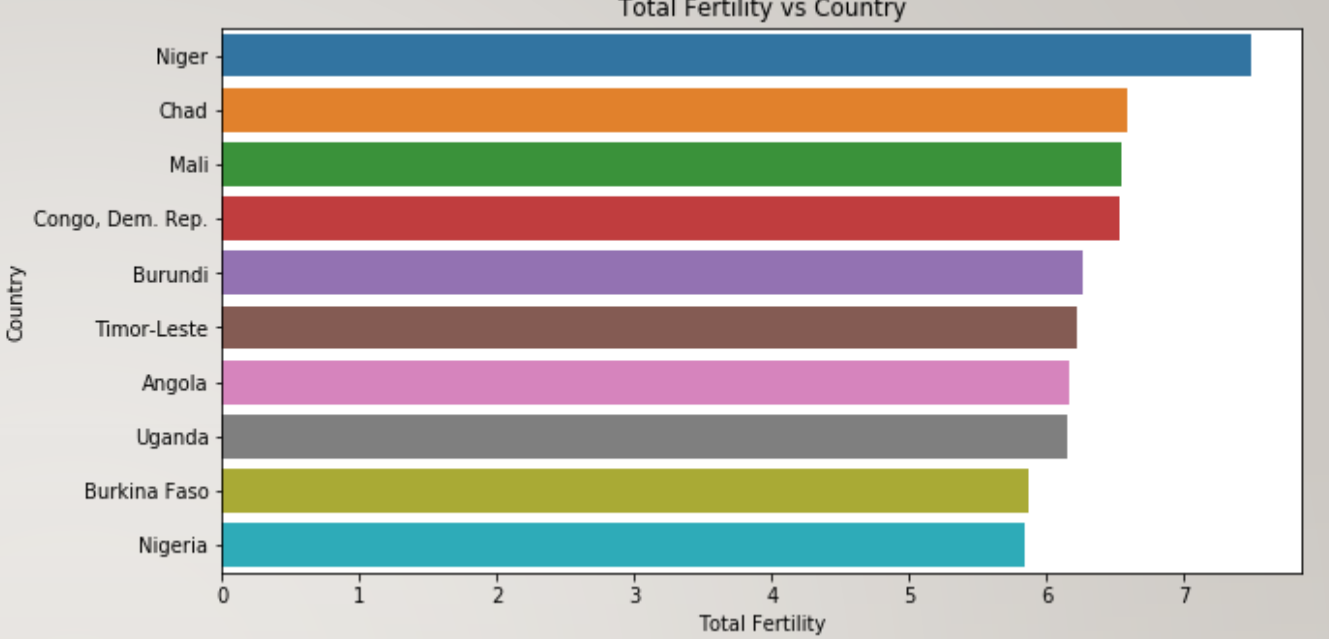


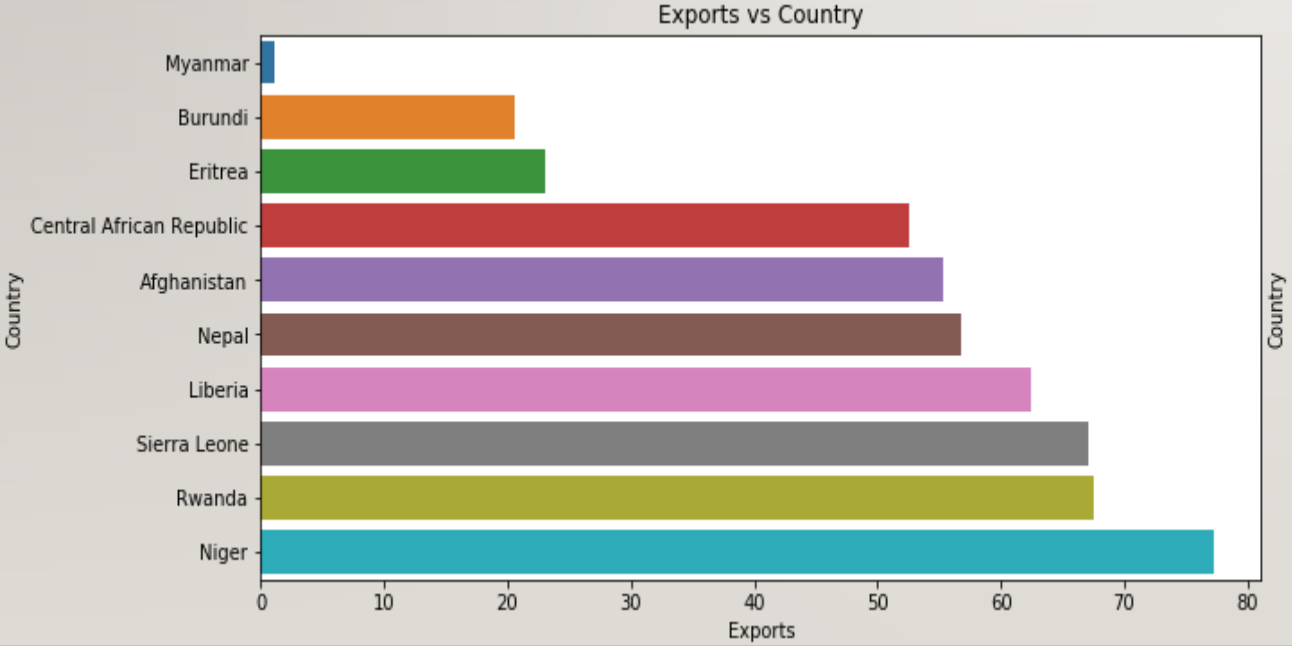
FINDING RELATIONSHIPS PRIOR CLUSTERING

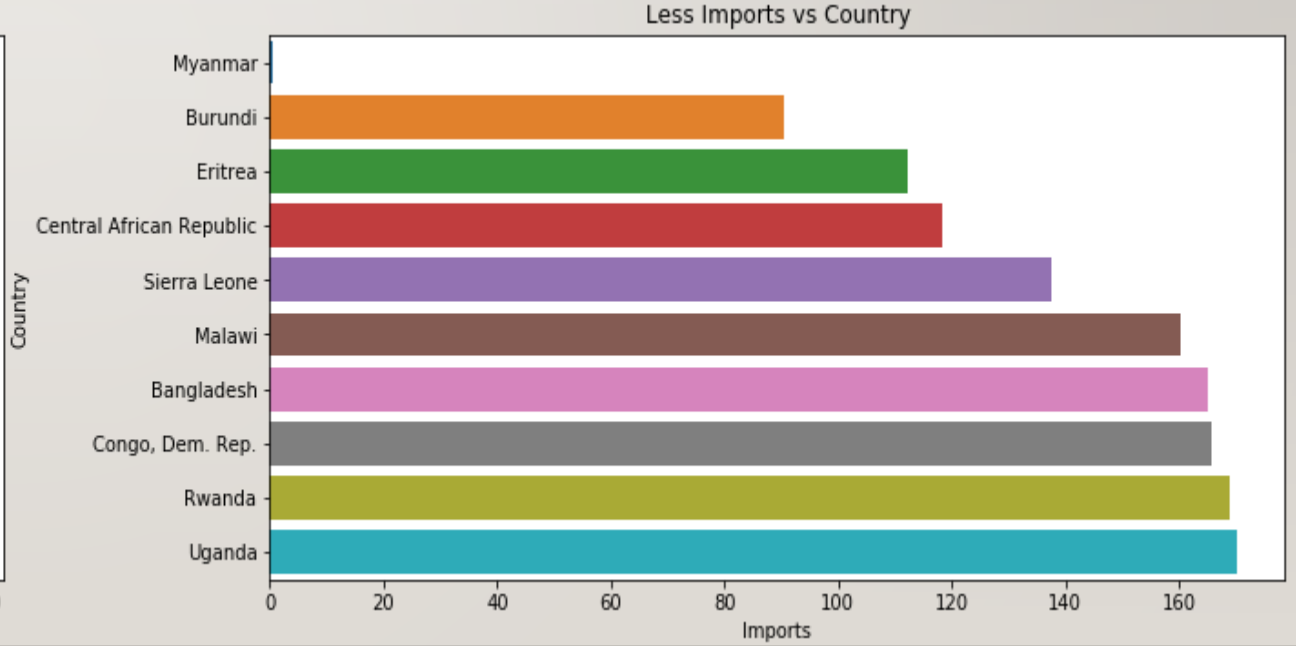


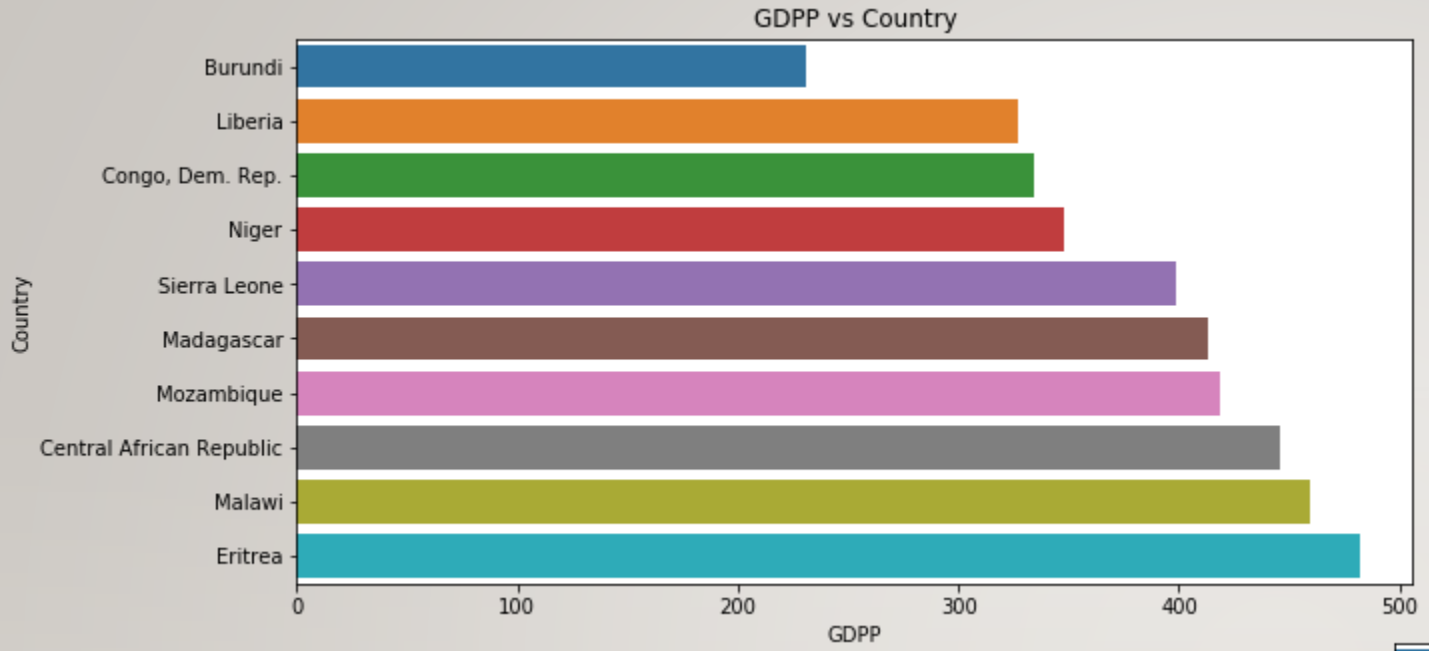


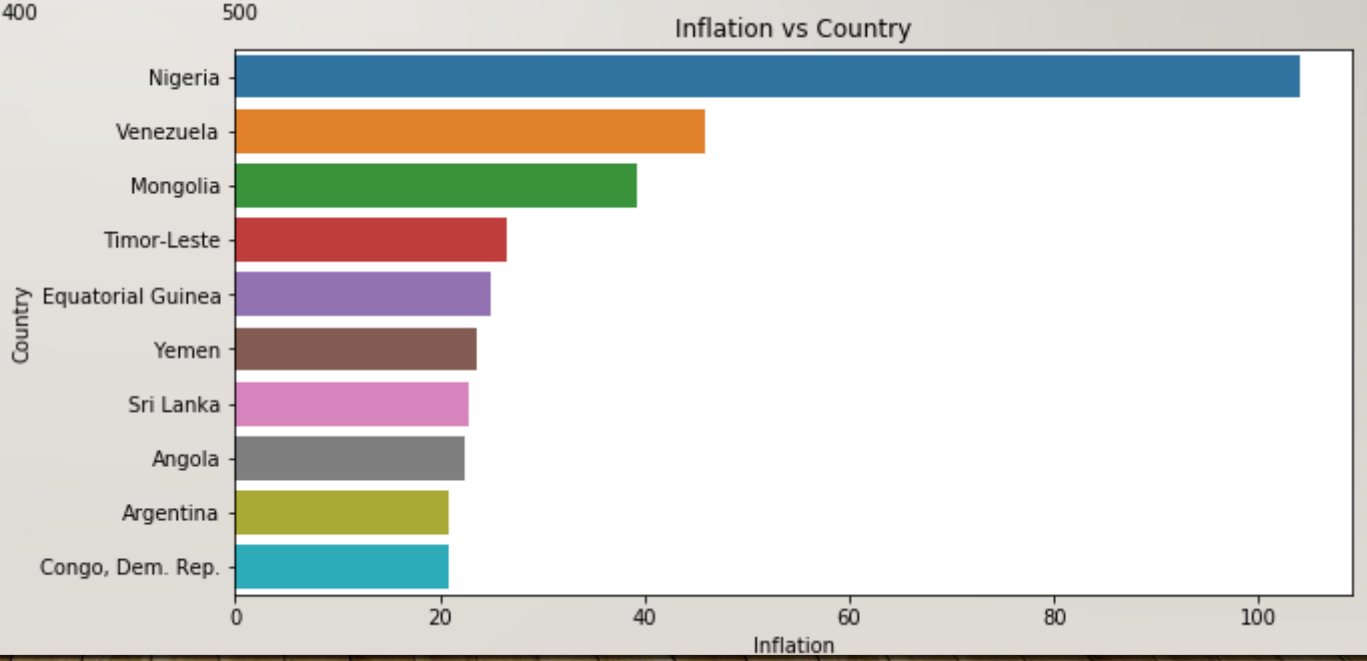

Life Expectancy vs Country
Haiti
Lesotho
Central African Republic
Zambia
Malawi
South Africa
Mozambique
Sierra Leone
Guinea-Bissau
Afghanistan
Country
0
10
20
30
40
50
Life Expectancy


Total Fertility vs Country
Niger
Chad
Mali
Congo, Dem. Rep.
Burundi
Timor-Leste
Angola
Uganda
Burkina Faso
Nigeria
Country
0
1
2
3
4
5
6
7
Total Fertility

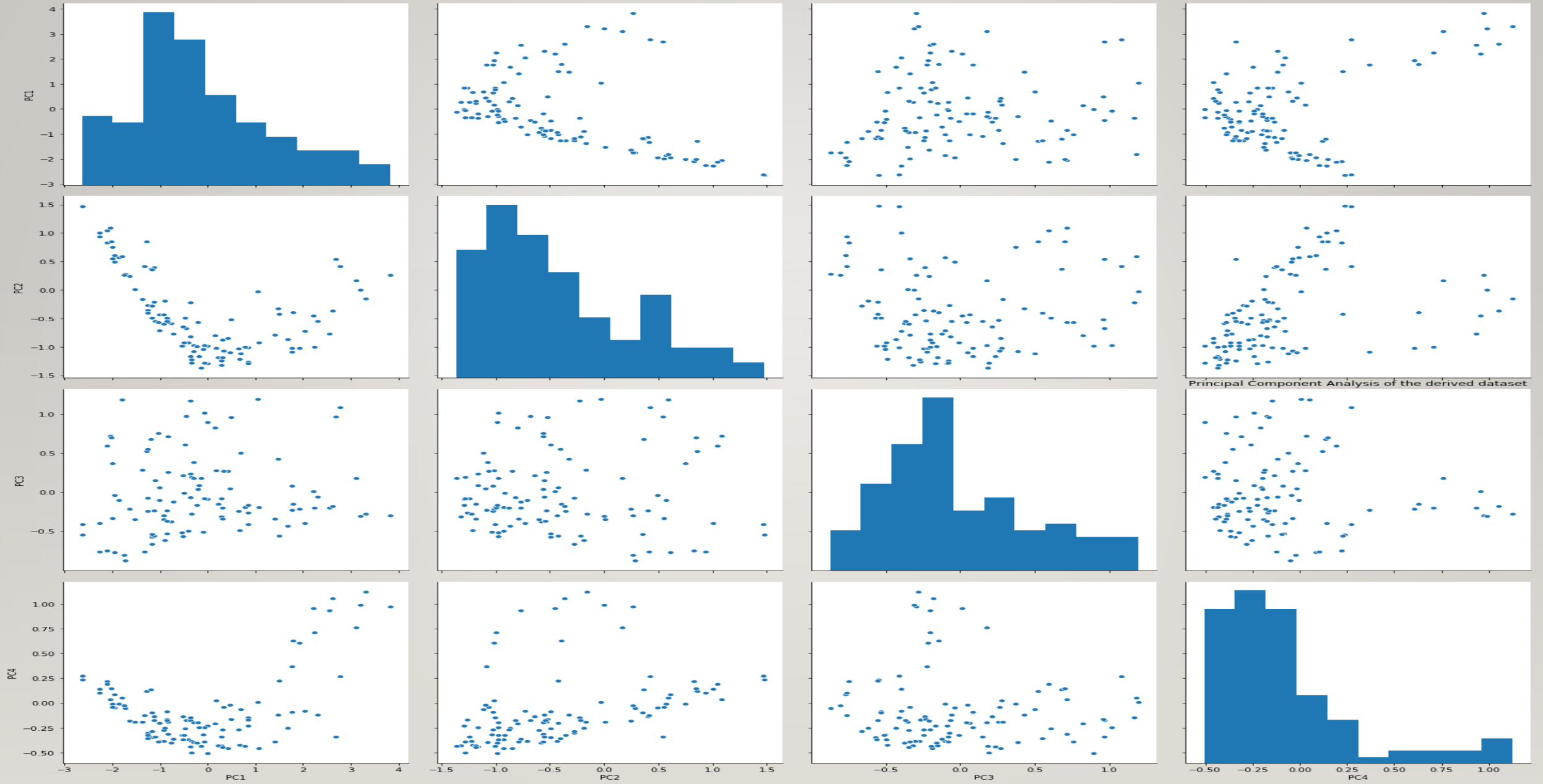

Exports vs Country
Myanmar
Burundi
Eritrea
Central African Republic
Afghanistan
Nepal
Liberia
Sierra Leone
Rwanda
Niger
Country
0
10
20
30
40
50
60
70
80
Exports


Less Imports vs Country
Myanmar
Burundi
Eritrea
Central African Republic
Sierra Leone
Malawi
Bangladesh
Congo, Dem. Rep.
Rwanda
Uganda
Country
0
20
40
60
80
100
120
140
160
Imports


GDPP vs Country
Burundi
Liberia
Congo, Dem. Rep.
Niger
Sierra Leone
Madagascar
Mozambique
Central African Republic
Malawi
Eritrea
Country
0
100
200
300
400
500
GDPP

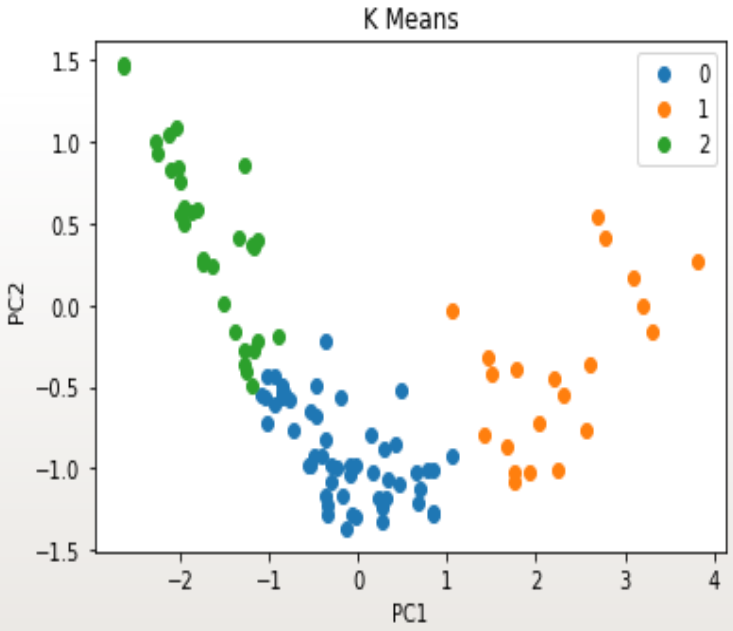

Inflation vs Country
Nigeria
Venezuela
Mongolia
Timor-Leste
Equatorial Guinea
Yemen
Sri Lanka
Angola
Argentina
Congo, Dem. Rep.
Country
0
20
40
60
80
100
Inflation

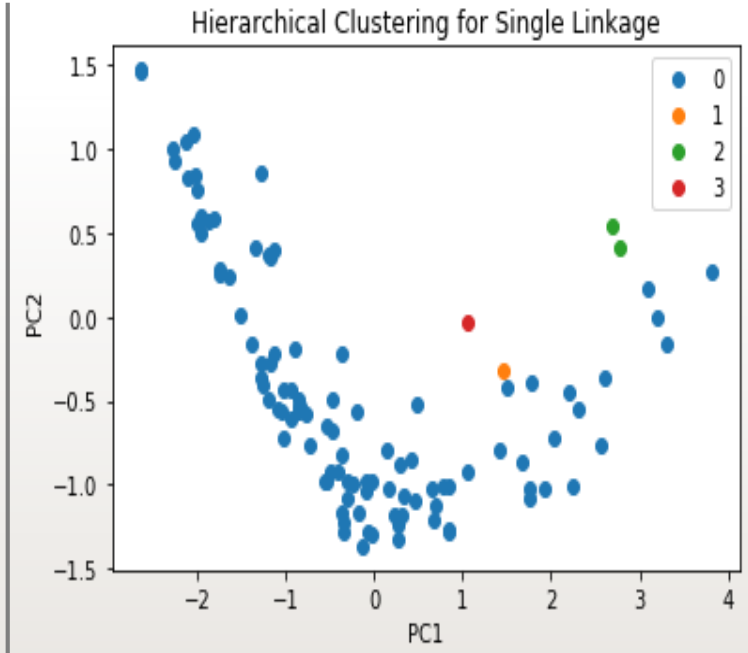
PRINCIPAL COMPONENT ANALYSIS

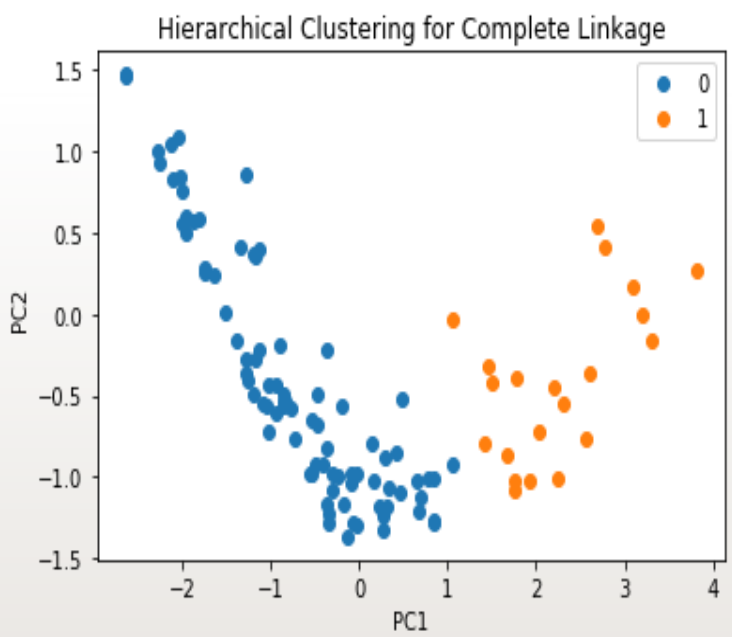

Principal Component Analysis of the derived dataset
PC1
PC2
PC3
PC4

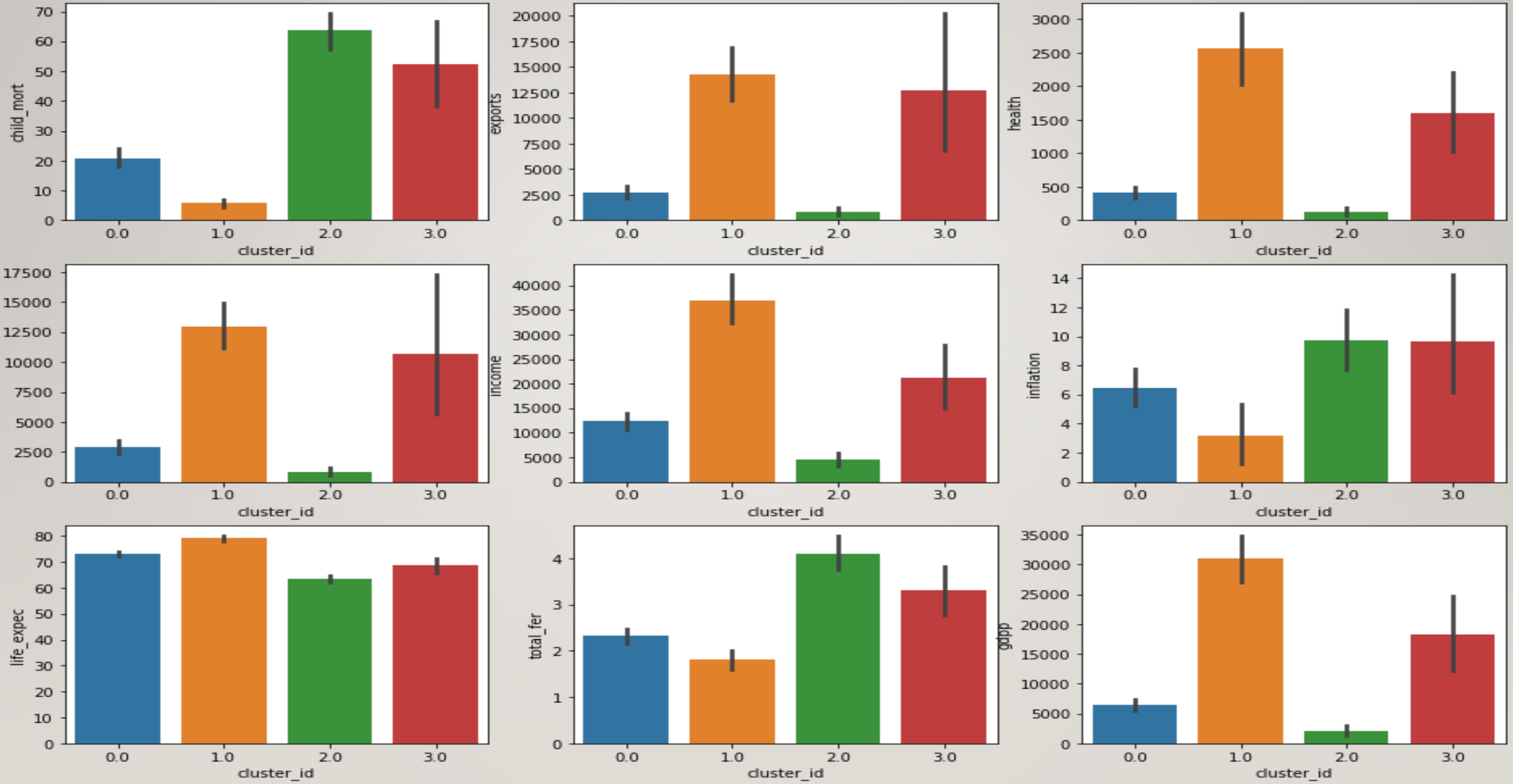
CLUSTERING

Best Distinction of Clusters



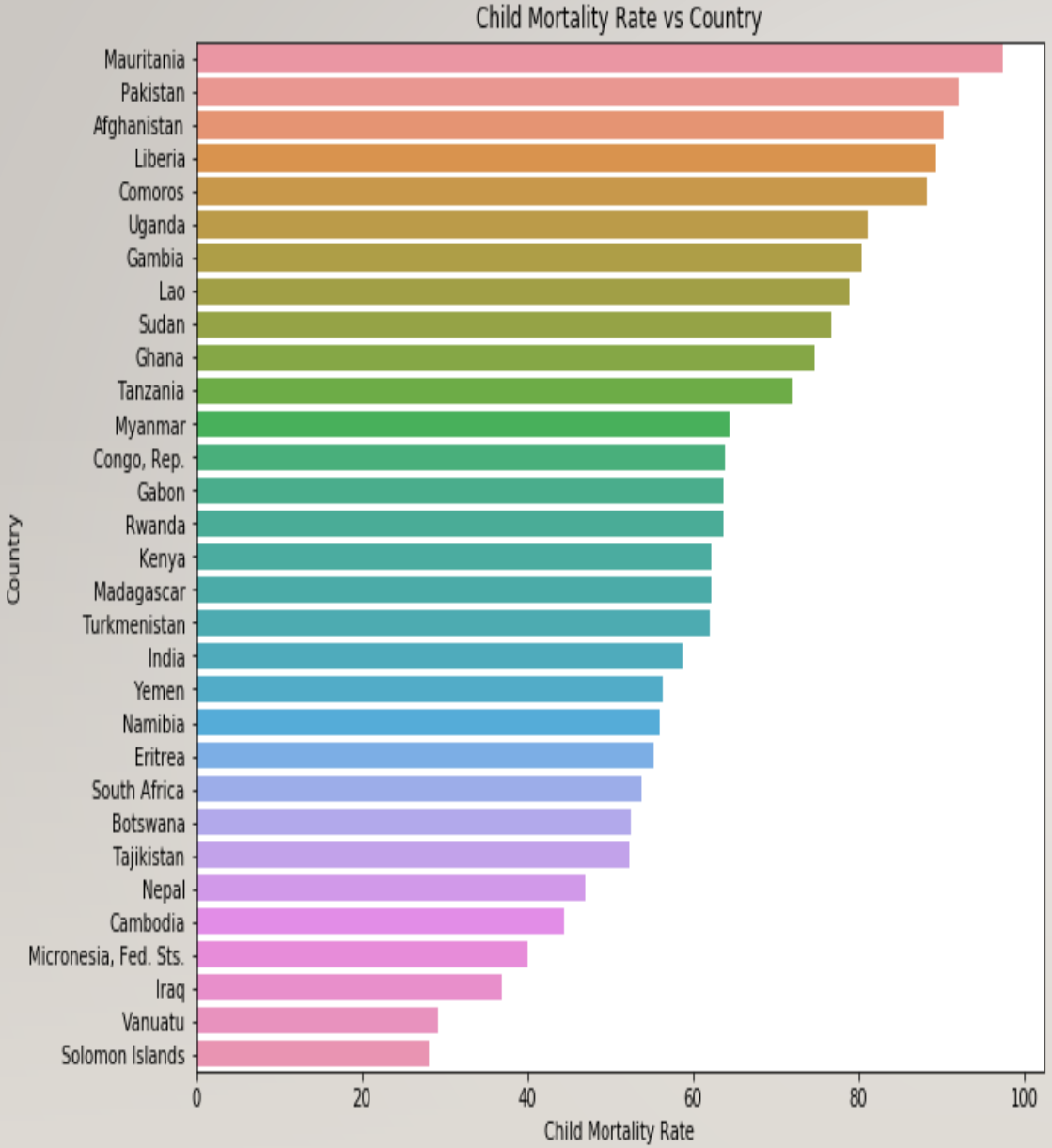


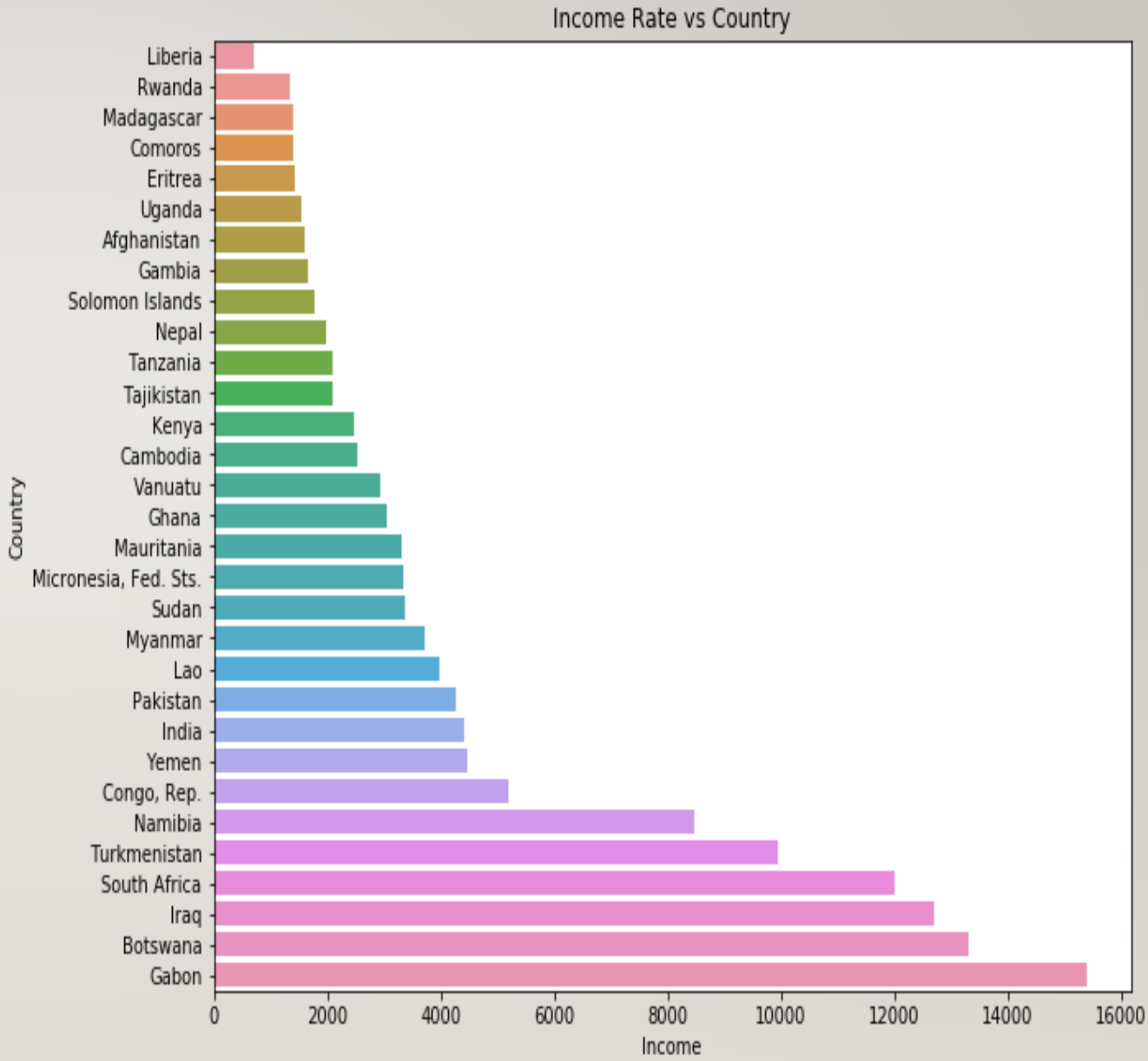


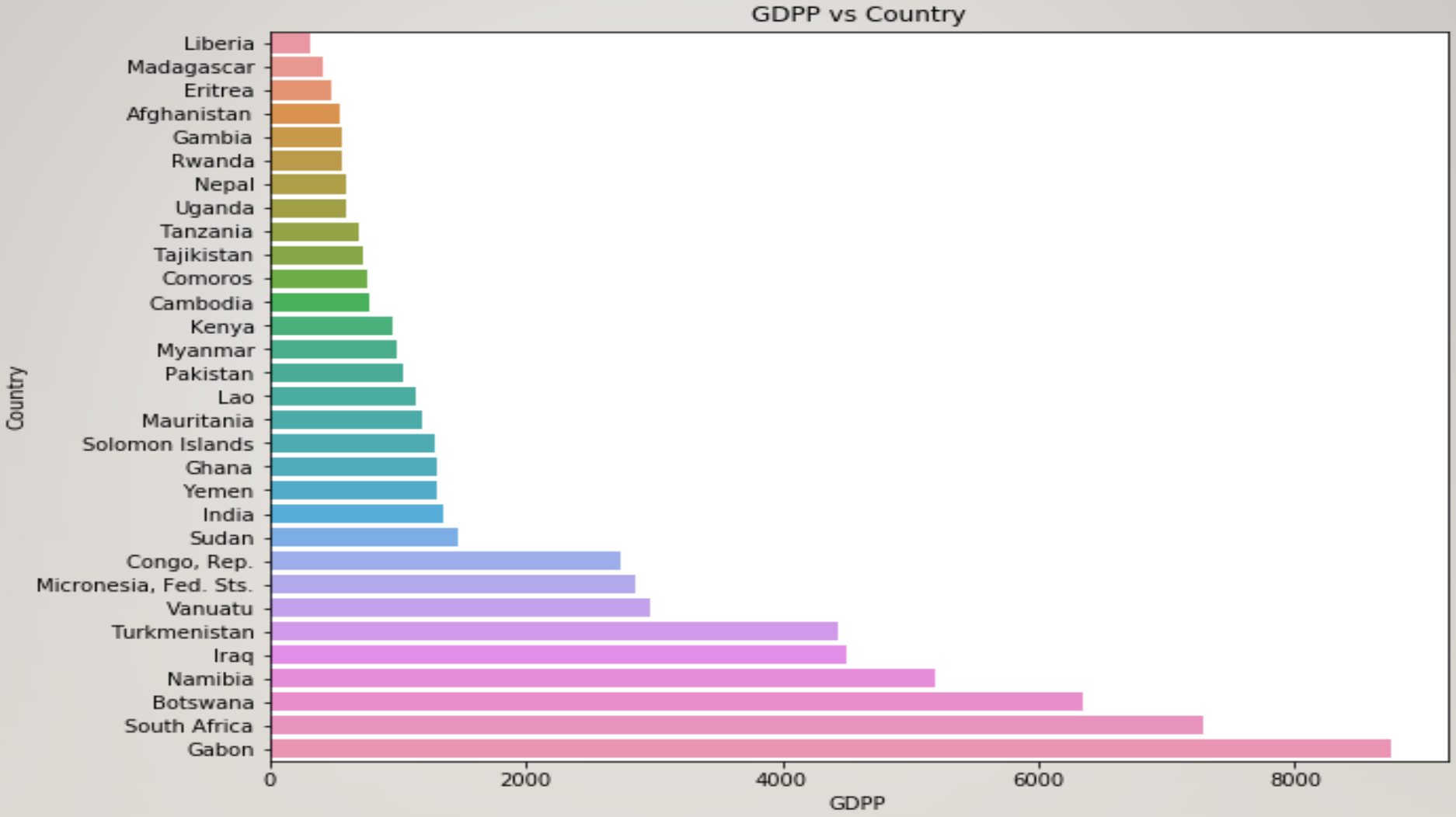

child_mort
exports
health
imports
income
inflation
life_expec
total_fer
gdpp
cluster_id
0.0
1.0
2.0
3.0

CLUSTER 2 STANDS OUT ABOVE ALL (TOTAL 31 COUNTRIES)

Afghanistan, Botswana, Cambodia, Comoros, Congo Rep. ,Eritrea, Gabon, Gambia, Ghana, India, Iraq, Kenya, Lao, Liberia, Madagascar, Mauritania, Micronesia, Fed. Sts. ,Myanmar, Namibia, Nepal, Pakistan, Rwanda, Solomon Islands, South Africa, Sudan, Tajikistan, Tanzania, Turkmenistan, Uganda, Vanuatu, Yemen


Child Mortality Rate vs Country
Mauritania
Pakistan
Afghanistan
Liberia
Comoros
Uganda
Gambia
Lao
Sudan
Ghana
Tanzania
Myanmar
Congo, Rep.
Gabon
Rwanda
Kenya
Madagascar
Turkmenistan
India
Yemen
Namibia
Eritrea
South Africa
Botswana
Tajikistan
Nepal
Cambodia
Micronesia, Fed. Sts.
Iraq
Vanuatu
Solomon Islands
Country
0
20
40
60
80
100
Child Mortality Rate


Income Rate vs Country
Liberia
Rwanda
Madagascar
Comoros
Eritrea
Uganda
Afghanistan
Gambia
Solomon Islands
Nepal
Tanzania
Tajikistan
Kenya
Cambodia
Vanuatu
Ghana
Mauritania
Micronesia, Fed. Sts.
Sudan
Myanmar
Lao
Pakistan
India
Yemen
Congo, Rep.
Namibia
Turkmenistan
South Africa
Iraq
Botswana
Gabon
Country
0
2000
4000
6000
8000
10000
12000
14000
16000
Income


GDPP vs Country
Liberia
Madagascar
Eritrea
Afghanistan
Gambia
Rwanda
Nepal
Uganda
Tanzania
Tajikistan
Comoros
Cambodia
Kenya
Myanmar
Pakistan
Lao
Mauritania
Solomon Islands
Ghana
Yemen
India
Sudan
Congo, Rep.
Micronesia, Fed. Sts.
Vanuatu
Turkmenistan
Iraq
Namibia
Botswana
South Africa
Gabon
Country
0
2000
4000
6000
8000
GDPP