

Title : WHO WorldHelp

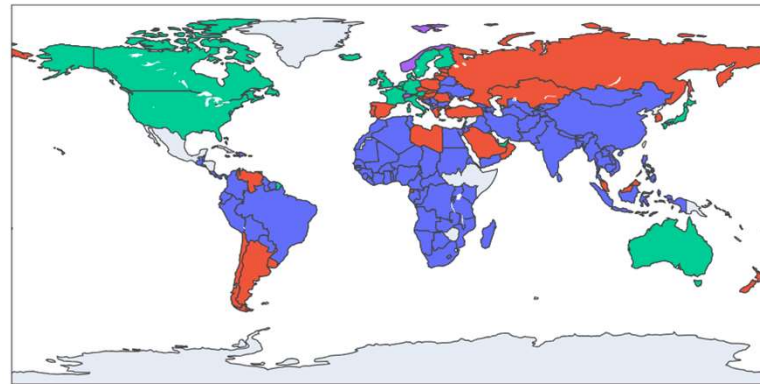
Internation Aid Allocation

ISSUE / PROBLEM

World Health Organization is planning to using the available aid to help people across different countries based on their country's socioeconomic status and healthcare availability.

RESPONSE

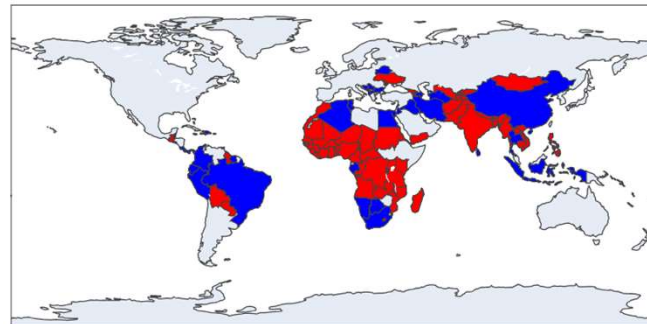
- We analyze the data and identify the data distribution and correlation between data.
 - We identify that 9 features related to socioeconomic status and healthcare availability is provided in the dataset for 167 countries.
 - We perform dimensionality reduction and try different clustering algorithms.
- ### IMPACT
- Our model helps us categorize countries into different classes which will help WHO to provide aid accordingly and efficiently.
 - Our insights also tell us which countries are performing worse/best in some sectors. WHO can pay special attention to that.



World Map with different countries color coded as their respective aid category.

	child_mort	exports	health	imports	income	inflation	life_expec	total_fer	gdpp
cluster_kmeans									
Intensive Aid Needed	54.135185	33.257398	6.321574	45.538573	6381.138889	9.204111	66.566667	3.519815	3027.259259
Minimal Aid Needed	5.070000	55.105000	9.267500	46.905000	47175.000000	2.890700	80.370000	1.790500	44660.000000
Moderate Aid Needed	12.102857	52.294286	6.845143	49.337143	25600.000000	6.595457	76.062857	1.976857	17347.714286
No Aid Needed	4.875000	85.250000	7.640000	61.900000	83625.000000	4.216750	81.000000	1.792500	84425.000000

Table : Cluster means for the four different country categories.



	child_mort	exports	health	imports	income	inflation	life_expec	total_fer	gdpp
cluster_int									
Intensive Aid Needed: Higher Priority	70.654286	29.857129	6.240571	46.689513	3342.185714	10.334943	63.307143	4.175571	1509.771429
Intensive Aid Needed: Lower Priority	23.705263	39.521053	6.470789	43.418421	11979.210526	7.121000	72.571053	2.311842	5822.631579

Table: Cluster means for sub categories within "intensive aid needed" category.

KEY INSIGHTS

- Based on the test results, KMeans model appear to perform the best. A total number of 4 categories were assigned for the countries in the dataset, "Intensive Aid Needed", "Moderate Aid Needed", "Minimal Aid Needed" and "No Aid Needed". "Intensive Aid Needed" category had the most countries in it with 108 countries.
- Even though all these countries have subpar socioeconomic status and healthcare, with these many countries, it would be helpful to further subcategorize. Within "Intensive Aid Needed" category, we see 2 different categories of countries with noticeable difference in some features.