

# **Supplement File (Income-Based Analysis of Health Security in Western Asia through an Integrated GHSI, MCDM, and Clustering Model)**

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Summary: This supplementary material supports our study titled "Income-Based Analysis of Health Security in Western Asia through an Integrated GHSI, MCDM, and Clustering Model." Additional context and data tables are provided to enrich the main analysis and findings. The document is divided into four primary sections. It begins by outlining the key health security criteria used to evaluate countries: prevention, detection and reporting, rapid response, health system adequacy, commitment to international norms, and overall risk environment. These criteria were applied to decision matrices for 2019 and 2021. This section also includes the development of matrices that determine the weights of the health security criteria, rank countries, and group them by performance. Comprehensive scores are presented for different income groups, including high-income (HIC), upper-middle-income (UMC), lower-middle-income (LMC), and low-income (LIC) countries. The second section details the results of the D-CRITIC calculations used to establish the relative importance of health security indicators for Western Asian nations, broken down by income category (LIC, LMC, UMC, HIC) for both 2019 and 2021. The third section explores the application of the D-CRITIC-CoCoSo model in ranking the health security performance of these countries for the same years. It includes normalized values, weighted comparability sequences, and final rankings that highlight the changes over time. The final section presents the clustering analysis, which segments countries based on their health security performance scores derived from the D-CRITIC-CoCoSo model. This analysis identified distinct performance clusters and assigned grades, showing the distribution of countries across income levels in both years.

## 1. Health security criteria and Initial decision matrixes for their evaluating

Table 1. Health Security Index Criteria

C	HIS Criteria	Description
C1	Prevention	The effectiveness of countries in preventing and managing the occurrence or dissemination of pathogens.
C2	Detection and Reporting	The strength and effectiveness of systems responsible for identifying and reporting potential global outbreaks.
C3	Rapid Response	A country's ability to promptly and effectively respond to and manage the spread of an epidemic.
C4	Health System	The sufficiency and resilience of a country's healthcare sector in providing adequate treatment to patients.
C5	Commitments and Adherence	A country's commitment to improving its national capabilities and adhering to international norms in health security.
C6	Risk Environment	The overall risk environment and country vulnerability to biological threats.

Table 2. Initial decision matrix for evaluating health security performance in WA (Case -2019)

Alternative	Income group	C1	C2	C3	C4	C5	C6
Bahrain	HIC	31.9	33.5	44.8	38.9	29.2	55
Cyprus	HIC	44.3	21.4	38	31.5	52.3	66.2
Israel	HIC	41.6	43.3	52.6	52.8	43.4	70.4
Kuwait	HIC	34.7	17.9	52.4	42.5	30.6	62.8
Oman	HIC	35.4	33.5	45.9	26.2	39.6	64.7

<b>Qatar</b>	<b>HIC</b>	<b>32.1</b>	<b>33.5</b>	<b>54.2</b>	<b>40</b>	<b>43.8</b>	<b>67</b>
<b>Saudi Arabia</b>	<b>HIC</b>	<b>33.4</b>	<b>50</b>	<b>39.4</b>	<b>38.4</b>	<b>49.3</b>	<b>59.7</b>
<b>United Arab Emirates</b>	<b>HIC</b>	<b>39</b>	<b>25.1</b>	<b>42.1</b>	<b>17.1</b>	<b>43.4</b>	<b>73.9</b>
<b>Syria</b>	<b>LIC</b>	<b>9.7</b>	<b>8.3</b>	<b>24.6</b>	<b>13.4</b>	<b>24</b>	<b>32</b>
<b>Yemen</b>	<b>LIC</b>	<b>9.2</b>	<b>8.3</b>	<b>24.7</b>	<b>12</b>	<b>37.5</b>	<b>27.8</b>
<b>Jordan</b>	<b>LMC</b>	<b>30.3</b>	<b>27.2</b>	<b>45.2</b>	<b>40</b>	<b>48.1</b>	<b>56.5</b>
<b>Lebanon</b>	<b>LMC</b>	<b>17</b>	<b>41</b>	<b>57</b>	<b>19.2</b>	<b>39.6</b>	<b>46.9</b>
<b>Armenia</b>	<b>UMC</b>	<b>75</b>	<b>67.9</b>	<b>72.6</b>	<b>55</b>	<b>58.7</b>	<b>50.3</b>
<b>Azerbaijan</b>	<b>UMC</b>	<b>32.6</b>	<b>21.7</b>	<b>33.4</b>	<b>21.7</b>	<b>37.8</b>	<b>57.8</b>
<b>Georgia</b>	<b>UMC</b>	<b>51.1</b>	<b>51.5</b>	<b>43.8</b>	<b>23.3</b>	<b>67.5</b>	<b>52</b>
<b>Iraq</b>	<b>UMC</b>	<b>17.3</b>	<b>15.8</b>	<b>26.7</b>	<b>15</b>	<b>29.5</b>	<b>35.4</b>
<b>Turkey</b>	<b>UMC</b>	<b>50.3</b>	<b>35.1</b>	<b>46.4</b>	<b>49.1</b>	<b>59.7</b>	<b>57.8</b>

Table 2. Initial decision matrix for evaluating health security performance in WA (Case -2021)

<b>Alternative</b>	<b>Income group</b>	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>	<b>C5</b>	<b>C6</b>
<b>Bahrain</b>	<b>HIC</b>	<b>28.6</b>	<b>37.2</b>	<b>33.5</b>	<b>41.2</b>	<b>21.9</b>	<b>55.2</b>
<b>Cyprus</b>	<b>HIC</b>	<b>44.1</b>	<b>25</b>	<b>34</b>	<b>32.3</b>	<b>52.8</b>	<b>62.9</b>
<b>Israel</b>	<b>HIC</b>	<b>41.6</b>	<b>46.7</b>	<b>44.4</b>	<b>55.2</b>	<b>30.9</b>	<b>64.2</b>
<b>Kuwait</b>	<b>HIC</b>	<b>27.2</b>	<b>17.9</b>	<b>40.3</b>	<b>42.5</b>	<b>29.2</b>	<b>63.9</b>
<b>Oman</b>	<b>HIC</b>	<b>35.4</b>	<b>33.5</b>	<b>31.7</b>	<b>28.6</b>	<b>41.5</b>	<b>64.2</b>
<b>Qatar</b>	<b>HIC</b>	<b>36.4</b>	<b>39.7</b>	<b>55.2</b>	<b>42.4</b>	<b>46.7</b>	<b>71.7</b>
<b>Saudi Arabia</b>	<b>HIC</b>	<b>33.4</b>	<b>52.1</b>	<b>32.7</b>	<b>40.7</b>	<b>49.5</b>	<b>61.2</b>
<b>United Arab Emirates</b>	<b>HIC</b>	<b>39</b>	<b>22.6</b>	<b>37.5</b>	<b>19.5</b>	<b>43.9</b>	<b>74.7</b>
<b>Syria</b>	<b>LIC</b>	<b>12.9</b>	<b>4.2</b>	<b>18</b>	<b>13.4</b>	<b>24.5</b>	<b>27.4</b>
<b>Yemen</b>	<b>LIC</b>	<b>0.8</b>	<b>4.2</b>	<b>17.5</b>	<b>12</b>	<b>37.5</b>	<b>24.9</b>
<b>Jordan</b>	<b>LMC</b>	<b>30.3</b>	<b>32.5</b>	<b>41.8</b>	<b>47.1</b>	<b>48.1</b>	<b>57.1</b>
<b>Lebanon</b>	<b>LMC</b>	<b>8.6</b>	<b>38.9</b>	<b>52</b>	<b>21.6</b>	<b>40.1</b>	<b>39</b>
<b>Armenia</b>	<b>UMC</b>	<b>79.3</b>	<b>69.6</b>	<b>56.3</b>	<b>58.8</b>	<b>59.2</b>	<b>47.6</b>
<b>Azerbaijan</b>	<b>UMC</b>	<b>32.6</b>	<b>21.7</b>	<b>32.4</b>	<b>24.1</b>	<b>38.4</b>	<b>59.3</b>
<b>Georgia</b>	<b>UMC</b>	<b>55.2</b>	<b>65.1</b>	<b>46.1</b>	<b>33.7</b>	<b>63.9</b>	<b>51.6</b>
<b>Iraq</b>	<b>UMC</b>	<b>15.4</b>	<b>24.2</b>	<b>21.3</b>	<b>20.2</b>	<b>32.8</b>	<b>30.1</b>
<b>Turkey</b>	<b>UMC</b>	<b>51.1</b>	<b>41.4</b>	<b>36.6</b>	<b>53.9</b>	<b>59.7</b>	<b>57.2</b>

Table 4. Table 4. Initial decision matrix for evaluating financial resources allocation in WA countries

<b>Country</b>	<b>Financing (2019)</b>	<b>Health Expenditure Per Capita (2019)</b>	<b>Financing (2021)</b>	<b>Health Expenditure Per Capita (2021)</b>
<b>Bahrain</b>	<b>8.3</b>	<b>26.2</b>	<b>8.3</b>	<b>19.7</b>
<b>Cyprus</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>19.2</b>
<b>Israel</b>	<b>0</b>	<b>33.7</b>	<b>0</b>	<b>35.6</b>
<b>Kuwait</b>	<b>16.7</b>	<b>47.1</b>	<b>8.3</b>	<b>55.5</b>
<b>Oman</b>	<b>8.3</b>	<b>30.4</b>	<b>16.7</b>	<b>26</b>
<b>Qatar</b>	<b>33.3</b>	<b>58.3</b>	<b>41.7</b>	<b>40.6</b>
<b>Saudi Arabia</b>	<b>16.7</b>	<b>39.3</b>	<b>8.3</b>	<b>37.7</b>
<b>United Arab Emirates</b>	<b>25</b>	<b>32.9</b>	<b>25</b>	<b>28.1</b>
<b>Syria</b>	<b>8.3</b>	<b>0</b>	<b>8.3</b>	<b>0</b>
<b>Yemen</b>	<b>33.3</b>	<b>1.3</b>	<b>33.3</b>	<b>0</b>

Jordan	0	5.9	0	6.2
Lebanon	8.3	9.5	8.3	9.3
Armenia	66.7	2.6	66.7	2.1
Azerbaijan	16.7	3.7	16.7	2.8
Georgia	66.7	5.2	41.7	5.3
Iraq	16.7	2.2	8.3	5.8
Turkey	66.7	16.6	66.7	15.5

## 2. Estimating the relative importance of health security indicators in WA countries using D-CRITIC approach.

### 2.1. Determining the relative importance of health security indicators in the WA based on 2019 data

Step 1	ID	Country	PR	DR	RR	HS	CA	RE	
	1	Armenia	1.0000	1.0000	1.0000	1.0000	0.8696	0.6806	
	2	Azerbaijan	0.4347	0.3196	0.4601	0.3945	0.5600	0.7821	
	3	Bahrain	0.4253	0.4934	0.6171	0.7073	0.4326	0.7442	
	4	Cyprus	0.5907	0.3152	0.5234	0.5727	0.7748	0.8958	
	5	Georgia	0.6813	0.7585	0.6033	0.4236	1.0000	0.7037	
	6	Iraq	0.2307	0.2327	0.3678	0.2727	0.4370	0.4790	
	7	Israel	0.5547	0.6377	0.7245	0.9600	0.6430	0.9526	
	8	Jordan	0.4040	0.4006	0.6226	0.7273	0.7126	0.7645	
	9	Kuwait	0.4627	0.2636	0.7218	0.7727	0.4533	0.8498	
	10	Lebanon	0.2267	0.6038	0.7851	0.3491	0.5867	0.6346	
	11	Oman	0.4720	0.4934	0.6322	0.4764	0.5867	0.8755	
	12	Qatar	0.4280	0.4934	0.7466	0.7273	0.6489	0.9066	
	13	Saudi Arabia	0.4453	0.7364	0.5427	0.6982	0.7304	0.8078	
	14	Syria	0.1293	0.1222	0.3388	0.2436	0.3556	0.4330	
	15	Turkey	0.6707	0.5169	0.6391	0.8927	0.8844	0.7821	
	16	United Arab Emirates	0.5200	0.3697	0.5799	0.3109	0.6430	1.0000	
	17	Yemen	0.1227	0.1222	0.3402	0.2182	0.5556	0.3762	
	Std. dv.	0.2167	0.2354	0.1710	0.2577	0.1755	0.1793		
Step 2		Distance correlation	PR	DR	RR	HS	CA	RE	
	1	PR	1.0000	0.6761	0.6841	0.6791	0.7617	0.7777	
	2	DR	0.6761	1.0000	0.7433	0.5727	0.6503	0.5847	
	3	RR	0.6841	0.7433	1.0000	0.7040	0.4926	0.6977	
	4	HS	0.6791	0.5727	0.7040	1.0000	0.4880	0.6156	
	5	CA	0.7617	0.6503	0.4926	0.4880	1.0000	0.5141	
	6	RE	0.7777	0.5847	0.6977	0.6156	0.5141	1.0000	
Step 3		Distance correlation	PR	DR	RR	HS	CA	RE	Sum
	1	PR	0.0000	0.3239	0.3159	0.3209	0.2383	0.2223	1.4212
	2	DR	0.3239	0.0000	0.2567	0.4273	0.3497	0.4153	1.7730
	3	RR	0.3159	0.2567	0.0000	0.2960	0.5074	0.3023	1.6783
	4	HS	0.3209	0.4273	0.2960	0.0000	0.5120	0.3844	1.9406
	5	CA	0.2383	0.3497	0.5074	0.5120	0.0000	0.4859	2.0934

	6	RE	0.2223	0.4153	0.3023	0.3844	0.4859	0.0000	1.8103
Step 4	Criteria		PR	DR	RR	HS	CA	RE	
	Information content		0.3079	0.4173	0.2871	0.5001	0.3674	0.3245	2.2044
	Weight		0.140	0.189	0.130	0.227	0.167	0.147	1.0000

## 2.2. Determining the relative importance of health security indicators in the WA based on 2021 data

Step 1	ID	Country	PR	DR	RR	HS	CA	RE	
	1	Armenia	1.0000	1.0000	1.0000	1.0000	0.9264	0.6372	
	2	Azerbaijan	0.4111	0.3118	0.5755	0.4099	0.6009	0.7938	
	3	Bahrain	0.3607	0.5345	0.5950	0.7007	0.3427	0.7390	
	4	Cyprus	0.5561	0.3592	0.6039	0.5493	0.8263	0.8420	
	5	Georgia	0.6961	0.9353	0.8188	0.5731	1.0000	0.6908	
	6	Iraq	0.1942	0.3477	0.3783	0.3435	0.5133	0.4029	
	7	Israel	0.5246	0.6710	0.7886	0.9388	0.4836	0.8594	
	8	Jordan	0.3821	0.4670	0.7425	0.8010	0.7527	0.7644	
	9	Kuwait	0.3430	0.2572	0.7158	0.7228	0.4570	0.8554	
	10	Lebanon	0.1084	0.5589	0.9236	0.3673	0.6275	0.5221	
	11	Oman	0.4464	0.4813	0.5631	0.4864	0.6495	0.8594	
	12	Qatar	0.4590	0.5704	0.9805	0.7211	0.7308	0.9598	
	13	Saudi Arabia	0.4212	0.7486	0.5808	0.6922	0.7746	0.8193	
	14	Syria	0.1627	0.0603	0.3197	0.2279	0.3834	0.3668	
	15	Turkey	0.6444	0.5948	0.6501	0.9167	0.9343	0.7657	
	16	United Arab Emirates	0.4918	0.3247	0.6661	0.3316	0.6870	1.0000	
	17	Yemen	0.0101	0.0603	0.3108	0.2041	0.5869	0.3333	
		Std. dv.	0.2362	0.2625	0.2072	0.2501	0.1933	0.2015	
Step 2		Distance correlation	PR	DR	RR	HS	CA	RE	
	1	PR	1.0000	0.6993	0.6316	0.6898	0.7346	0.7824	
	2	DR	0.6993	1.0000	0.6988	0.6784	0.6165	0.5356	
	3	RR	0.6316	0.6988	1.0000	0.6247	0.4751	0.6710	
	4	HS	0.6898	0.6784	0.6247	1.0000	0.4857	0.6305	
	5	CA	0.7346	0.6165	0.4751	0.4857	1.0000	0.4373	
	6	RE	0.7824	0.5356	0.6710	0.6305	0.4373	1.0000	
Step 3		Distance correlation	PR	DR	RR	HS	CA	RE	Sum
	1	PR	0.0000	0.3007	0.3684	0.3102	0.2654	0.2176	1.4623
	2	DR	0.3007	0.0000	0.3012	0.3216	0.3835	0.4644	1.7713
	3	RR	0.3684	0.3012	0.0000	0.3753	0.5249	0.3290	1.8988
	4	HS	0.3102	0.3216	0.3753	0.0000	0.5143	0.3695	1.8909
	5	CA	0.2654	0.3835	0.5249	0.5143	0.0000	0.5627	2.2508
	6	RE	0.2176	0.4644	0.3290	0.3695	0.5627	0.0000	1.9432
Step 4	Criteria		PR	DR	RR	HS	CA	RE	
	Information content		0.3454	0.4650	0.3934	0.4729	0.4351	0.3915	2.5032
	Weight		0.138	0.186	0.157	0.189	0.174	0.156	1.0000

### 2.3. Determining the relative importance of health security indicators in LIC and LMC based on 2019 data

On 2019 data

Step 1	ID	Country	PR	DR	RR	HS	CA	RE	
	1	Syria	0.3201	0.2024	0.4316	0.3350	0.4990	0.5664	
	2	Yemen	0.3036	0.2024	0.4333	0.3000	0.7796	0.4920	
	3	Jordan	1.0000	0.6634	0.7930	1.0000	1.0000	1.0000	
	4	Lebanon	0.5611	1.0000	1.0000	0.4800	0.8233	0.8301	
		Std. dv.	0.3246	0.3884	0.2809	0.3237	0.2075	0.2353	
Step 2		Distance correlation	PR	DR	RR	HS	CA	RE	
	1	PR	1.0000	0.8304	0.8420	0.9903	0.8434	0.9629	
	2	DR	0.8304	1.0000	0.9988	0.7477	0.7156	0.9218	
	3	RR	0.8420	0.9988	1.0000	0.7582	0.7270	0.9347	
	4	HS	0.9903	0.7477	0.7582	1.0000	0.8308	0.9192	
	5	CA	0.8434	0.7156	0.7270	0.8308	1.0000	0.8183	
	6	RE	0.9629	0.9218	0.9347	0.9192	0.8183	1.0000	
Step 3		Distance correlation	PR	DR	RR	HS	CA	RE	Sum
	1	PR	0.0000	0.1696	0.1580	0.0097	0.1566	0.0371	0.5310
	2	DR	0.1696	0.0000	0.0012	0.2523	0.2844	0.0782	0.7857
	3	RR	0.1580	0.0012	0.0000	0.2418	0.2730	0.0653	0.7394
	4	HS	0.0097	0.2523	0.2418	0.0000	0.1692	0.0808	0.7538
	5	CA	0.1566	0.2844	0.2730	0.1692	0.0000	0.1817	1.0650
	6	RE	0.0371	0.0782	0.0653	0.0808	0.1817	0.0000	0.4430
Step 4	Criteria		PR	DR	RR	HS	CA	RE	
	Information content		0.1724	0.3052	0.2077	0.2440	0.2210	0.1042	1.2545
	Weight		0.137	0.243	0.166	0.195	0.176	0.083	1.0000

### 2.4. Determining the relative importance of health security indicators in LIC and LMC based on 2021 data

on 2021 data

Step 1	ID	Country	PR	DR	RR	HS	CA	RE	
	1	Syria	0.4257	0.1080	0.3462	0.2845	0.5094	0.4799	
	2	Yemen	0.0264	0.1080	0.3365	0.2548	0.7796	0.4361	
	3	Jordan	1.0000	0.8355	0.8038	1.0000	1.0000	1.0000	
	4	Lebanon	0.2838	1.0000	1.0000	0.4586	0.8337	0.6830	
		Std. dv.	0.4120	0.4723	0.3334	0.3456	0.2037	0.2571	
Step 2		Distance correlation	PR	DR	RR	HS	CA	RE	
	1	PR	1.0000	0.6136	0.6188	0.9336	0.7866	0.9015	
	2	DR	0.6136	1.0000	0.9966	0.7937	0.7626	0.8848	
	3	RR	0.6188	0.9966	1.0000	0.7843	0.7533	0.8746	
	4	HS	0.9336	0.7937	0.7843	1.0000	0.8372	0.9867	
	5	CA	0.7866	0.7626	0.7533	0.8372	1.0000	0.8498	
	6	RE	0.9015	0.8848	0.8746	0.9867	0.8498	1.0000	
	Step 3		Distance correlation	PR	DR	RR	HS	CA	RE
1		PR	0.0000	0.3864	0.3812	0.0664	0.2134	0.0985	1.1458
2		DR	0.3864	0.0000	0.0034	0.2063	0.2374	0.1152	0.9488
3		RR	0.3812	0.0034	0.0000	0.2157	0.2467	0.1254	0.9723

	4	HS	0.0664	0.2063	0.2157	0.0000	0.1628	0.0133	0.6644
	5	CA	0.2134	0.2374	0.2467	0.1628	0.0000	0.1502	1.0105
	6	RE	0.0985	0.1152	0.1254	0.0133	0.1502	0.0000	0.5025
Step 4	Criteria		PR	DR	RR	HS	CA	RE	
	Information content		0.4720	0.4481	0.3242	0.2296	0.2059	0.1292	1.8090
	Weight		0.261	0.248	0.179	0.127	0.114	0.071	1.0000

## 2.5. Determining the relative importance of health security indicators in UMC based on 2019 data

Step 1	ID	Country	PR	DR	RR	HS	CA	RE	
	1	Armenia	1.0000	1.0000	1.0000	1.0000	0.8696	0.8702	
	2	Azerbaijan	0.4347	0.3196	0.4601	0.3945	0.5600	1.0000	
	3	Georgia	0.6813	0.7585	0.6033	0.4236	1.0000	0.8997	
	4	Iraq	0.2307	0.2327	0.3678	0.2727	0.4370	0.6125	
	5	Turkey	0.6707	0.5169	0.6391	0.8927	0.8844	1.0000	
		Std. dv.	0.2895	0.3161	0.2419	0.3264	0.2392	0.1587	
Step 2		Distance correlation	PR	DR	RR	HS	CA	RE	
	1	PR	1.0000	0.9466	0.9760	0.8138	0.9115	0.7446	
	2	DR	0.9466	1.0000	0.9245	0.6974	0.8770	0.6730	
	3	RR	0.9760	0.9245	1.0000	0.8513	0.8177	0.6455	
	4	HS	0.8138	0.6974	0.8513	1.0000	0.7354	0.5423	
	5	CA	0.9115	0.8770	0.8177	0.7354	1.0000	0.6854	
	6	RE	0.7446	0.6730	0.6455	0.5423	0.6854	1.0000	
Step 3		Distance correlation	PR	DR	RR	HS	CA	RE	Sum
	1	PR	0.0000	0.0534	0.0240	0.1862	0.0885	0.2554	0.6074
	2	DR	0.0534	0.0000	0.0755	0.3026	0.1230	0.3270	0.8814
	3	RR	0.0240	0.0755	0.0000	0.1487	0.1823	0.3545	0.7849
	4	HS	0.1862	0.3026	0.1487	0.0000	0.2646	0.4577	1.3597
	5	CA	0.0885	0.1230	0.1823	0.2646	0.0000	0.3146	0.9730
	6	RE	0.2554	0.3270	0.3545	0.4577	0.3146	0.0000	1.7092
Step 4	Criteria		PR	DR	RR	HS	CA	RE	
	Information content		0.1759	0.2786	0.1899	0.4438	0.2328	0.2713	1.5922
	Weight		0.110	0.175	0.119	0.279	0.146	0.170	1.0000

## 2.6. Determining the relative importance of health security indicators in UMC based on 2021 data

Step 1	ID	Country	PR	DR	RR	HS	CA	RE
	1	Armenia	1.0000	1.0000	1.0000	1.0000	0.9264	0.8027
	2	Azerbaijan	0.4111	0.3118	0.5755	0.4099	0.6009	1.0000
	3	Georgia	0.6961	0.9353	0.8188	0.5731	1.0000	0.8702
	4	Iraq	0.1942	0.3477	0.3783	0.3435	0.5133	0.5076
	5	Turkey	0.6444	0.5948	0.6501	0.9167	0.9343	0.9646
		Std. dv.	0.3045	0.3209	0.2368	0.2963	0.2212	0.1958
Step 2		Distance correlation	PR	DR	RR	HS	CA	RE
	1	PR	1.0000	0.9087	0.9673	0.8633	0.9157	0.7662

	2	DR	0.9087	1.0000	0.9425	0.7317	0.8916	0.6040	
	3	RR	0.9673	0.9425	1.0000	0.7582	0.8451	0.7904	
	4	HS	0.8633	0.7317	0.7582	1.0000	0.8494	0.5627	
	5	CA	0.9157	0.8916	0.8451	0.8494	1.0000	0.6632	
	6	RE	0.7662	0.6040	0.7904	0.5627	0.6632	1.0000	
Step 3		Distance correlation	PR	DR	RR	HS	CA	RE	Sum
	1	PR	0.0000	0.0913	0.0327	0.1367	0.0843	0.2338	0.5789
	2	DR	0.0913	0.0000	0.0575	0.2683	0.1084	0.3960	0.9214
	3	RR	0.0327	0.0575	0.0000	0.2418	0.1549	0.2096	0.6966
	4	HS	0.1367	0.2683	0.2418	0.0000	0.1506	0.4373	1.2347
	5	CA	0.0843	0.1084	0.1549	0.1506	0.0000	0.3368	0.8351
	6	RE	0.2338	0.3960	0.2096	0.4373	0.3368	0.0000	1.6135
Step 4	Criteria		PR	DR	RR	HS	CA	RE	
	Information content		0.1763	0.2957	0.1650	0.3658	0.1847	0.3159	1.5034
	Weight		0.117	0.197	0.110	0.243	0.123	0.210	1.0000

## 2.7. Determining the relative importance of health security indicators in HIC based on 2019 data

Step 1	ID	Country	PR	DR	RR	HS	CA	RE	
	1	Bahrain	0.7201	0.6700	0.8266	0.7367	0.5583	0.7442	
	2	Cyprus	1.0000	0.4280	0.7011	0.5966	1.0000	0.8958	
	3	Israel	0.9391	0.8660	0.9705	1.0000	0.8298	0.9526	
	4	Kuwait	0.7833	0.3580	0.9668	0.8049	0.5851	0.8498	
	5	Oman	0.7991	0.6700	0.8469	0.4962	0.7572	0.8755	
	6	Qatar	0.7246	0.6700	1.0000	0.7576	0.8375	0.9066	
	7	Saudi Arabia	0.7540	1.0000	0.7269	0.7273	0.9426	0.8078	
	8	United Arab Emirates	0.8804	0.5020	0.7768	0.3239	0.8298	1.0000	
		Std. dv.	0.1037	0.2160	0.1158	0.2060	0.1556	0.0804	
Step 2		Distance correlation	PR	DR	RR	HS	CA	RE	
	1	PR	1.0000	0.4948	0.3988	0.5969	0.5687	0.7152	
	2	DR	0.4948	1.0000	0.3976	0.5514	0.4758	0.4646	
	3	RR	0.3988	0.3976	1.0000	0.6794	0.5969	0.4287	
	4	HS	0.5969	0.5514	0.6794	1.0000	0.4418	0.6332	
	5	CA	0.5687	0.4758	0.5969	0.4418	1.0000	0.6619	
	6	RE	0.7152	0.4646	0.4287	0.6332	0.6619	1.0000	
Step 3		Distance correlation	PR	DR	RR	HS	CA	RE	Sum
	1	PR	0.0000	0.5052	0.6012	0.4031	0.4313	0.2848	2.2257
	2	DR	0.5052	0.0000	0.6024	0.4486	0.5242	0.5354	2.6158
	3	RR	0.6012	0.6024	0.0000	0.3206	0.4031	0.5713	2.4987
	4	HS	0.4031	0.4486	0.3206	0.0000	0.5582	0.3668	2.0974
	5	CA	0.4313	0.5242	0.4031	0.5582	0.0000	0.3381	2.2548
	6	RE	0.2848	0.5354	0.5713	0.3668	0.3381	0.0000	2.0965
Step 4	Criteria		PR	DR	RR	HS	CA	RE	
	Information content		0.2308	0.5651	0.2893	0.4321	0.3509	0.1685	2.0366



	Weight	0.113	0.277	0.142	0.212	0.172	0.083	1.0000
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## 2.8. Determining the relative importance of health security indicators in HIC based on 2021 data

Step 1	ID	Country	PR	DR	RR	HS	CA	RE	
	1	Bahrain	0.6485	0.7140	0.6069	0.7464	0.4148	0.7390	
	2	Cyprus	1.0000	0.4798	0.6159	0.5851	1.0000	0.8420	
	3	Israel	0.9433	0.8964	0.8043	1.0000	0.5852	0.8594	
	4	Kuwait	0.6168	0.3436	0.7301	0.7699	0.5530	0.8554	
	5	Oman	0.8027	0.6430	0.5743	0.5181	0.7860	0.8594	
	6	Qatar	0.8254	0.7620	1.0000	0.7681	0.8845	0.9598	
	7	Saudi Arabia	0.7574	1.0000	0.5924	0.7373	0.9375	0.8193	
	8	United Arab Emirates	0.8844	0.4338	0.6793	0.3533	0.8314	1.0000	
		Std. dv.	0.1341	0.2295	0.1441	0.1956	0.2077	0.0809	
Step 2		Distance correlation	PR	DR	RR	HS	CA	RE	
	1	PR	1.0000	0.4517	0.4132	0.5783	0.6657	0.5731	
	2	DR	0.4517	1.0000	0.4879	0.6459	0.3748	0.4291	
	3	RR	0.4132	0.4879	1.0000	0.5953	0.4346	0.6379	
	4	HS	0.5783	0.6459	0.5953	1.0000	0.5930	0.5429	
	5	CA	0.6657	0.3748	0.4346	0.5930	1.0000	0.6047	
	6	RE	0.5731	0.4291	0.6379	0.5429	0.6047	1.0000	
Step 3		Distance correlation	PR	DR	RR	HS	CA	RE	Sum
	1	PR	0.0000	0.5483	0.5868	0.4217	0.3343	0.4269	2.3180
	2	DR	0.5483	0.0000	0.5121	0.3541	0.6252	0.5709	2.6105
	3	RR	0.5868	0.5121	0.0000	0.4047	0.5654	0.3621	2.4311
	4	HS	0.4217	0.3541	0.4047	0.0000	0.4070	0.4571	2.0445
	5	CA	0.3343	0.6252	0.5654	0.4070	0.0000	0.3953	2.3272
	6	RE	0.4269	0.5709	0.3621	0.4571	0.3953	0.0000	2.2123
Step 4	Criteria		PR	DR	RR	HS	CA	RE	
	Information content		0.3108	0.5992	0.3503	0.3998	0.4834	0.1790	2.3226
	Weight		0.134	0.258	0.151	0.172	0.208	0.077	1.0000

## 3. Application of D-CRITIC-CoCoSo-model for Evaluating and Ranking of Western Asian Countries

### 3.1. Health security performance ranking results of WA countries (Case - 2019)

1. Construct the decision matrix (X)							
	Country	PR	DR	RR	HS	CA	RE
1	Bahrain	31.9	33.5	44.8	38.9	29.2	55
2	Cyprus	44.3	21.4	38	31.5	52.3	66.2
3	Israel	41.6	43.3	52.6	52.8	43.4	70.4
4	Kuwait	34.7	17.9	52.4	42.5	30.6	62.8
5	Oman	35.4	33.5	45.9	26.2	39.6	64.7
6	Qatar	32.1	33.5	54.2	40	43.8	67
7	Saudi Arabia	33.4	50	39.4	38.4	49.3	59.7

8	United Arab Emirates	39	25.1	42.1	17.1	43.4	73.9
9	Syria	9.7	8.3	24.6	13.4	24	32
10	Yemen	9.2	8.3	24.7	12	37.5	27.8
11	Jordan	30.3	27.2	45.2	40	48.1	56.5
12	Lebanon	17	41	57	19.2	39.6	46.9
13	Armenia	75	67.9	72.6	55	58.7	50.3
14	Azerbaijan	32.6	21.7	33.4	21.7	37.8	57.8
15	Georgia	51.1	51.5	43.8	23.3	67.5	52
16	Iraq	17.3	15.8	26.7	15	29.5	35.4
17	Turkey	50.3	35.1	46.4	49.1	59.7	57.8

2. Calculate the normalized values of alternatives (N).

	Country	PR	DR	RR	HS	CA	RE
1	Bahrain	0.34498	0.42282	0.42083	0.62558	0.11954	0.59002
2	Cyprus	0.53343	0.21980	0.27917	0.45349	0.65057	0.83297
3	Israel	0.49240	0.58725	0.58333	0.94884	0.44598	0.92408
4	Kuwait	0.38754	0.16107	0.57917	0.70930	0.15172	0.75922
5	Oman	0.39818	0.42282	0.44375	0.33023	0.35862	0.80043
6	Qatar	0.34802	0.42282	0.61667	0.65116	0.45517	0.85033
7	Saudi Arabia	0.36778	0.69966	0.30833	0.61395	0.58161	0.69197
8	United Arab Emirates	0.45289	0.28188	0.36458	0.11860	0.44598	1.00000
9	Syria	0.00760	0.00000	0.00000	0.03256	0.00000	0.09111
10	Yemen	0.00000	0.00000	0.00208	0.00000	0.31034	0.00000
11	Jordan	0.32067	0.31711	0.42917	0.65116	0.55402	0.62256
12	Lebanon	0.11854	0.54866	0.67500	0.16744	0.35862	0.41432
13	Armenia	1.00000	1.00000	1.00000	1.00000	0.79770	0.48807
14	Azerbaijan	0.35562	0.22483	0.18333	0.22558	0.31724	0.65076
15	Georgia	0.63678	0.72483	0.40000	0.26279	1.00000	0.52495
16	Iraq	0.12310	0.12584	0.04375	0.06977	0.12644	0.16486
17	Turkey	0.62462	0.44966	0.45417	0.86279	0.82069	0.65076
Wj		0.13969	0.18932	0.13022	0.22685	0.16669	0.14723

3. Calculate the sum the weighted comparability sequence (Si)

	Country	PR	DR	RR	HS	CA	RE	Si
1	Bahrain	0.048	0.080	0.055	0.142	0.020	0.087	0.432
2	Cyprus	0.075	0.042	0.036	0.103	0.108	0.123	0.486
3	Israel	0.069	0.111	0.076	0.215	0.074	0.136	0.682
4	Kuwait	0.054	0.030	0.075	0.161	0.025	0.112	0.458
5	Oman	0.056	0.080	0.058	0.075	0.060	0.118	0.446
6	Qatar	0.049	0.080	0.080	0.148	0.076	0.125	0.558
7	Saudi Arabia	0.051	0.132	0.040	0.139	0.097	0.102	0.562

8	United Arab Emirates	0.063	0.053	0.047	0.027	0.074	0.147	0.413
9	Syria	0.001	0.000	0.000	0.007	0.000	0.013	0.022
10	Yemen	0.000	0.000	0.000	0.000	0.052	0.000	0.052
11	Jordan	0.045	0.060	0.056	0.148	0.092	0.092	0.492
12	Lebanon	0.017	0.104	0.088	0.038	0.060	0.061	0.367
13	Armenia	0.140	0.189	0.130	0.227	0.133	0.072	0.891
14	Azerbaijan	0.050	0.043	0.024	0.051	0.053	0.096	0.316
15	Georgia	0.089	0.137	0.052	0.060	0.167	0.077	0.582
16	Iraq	0.017	0.024	0.006	0.016	0.021	0.024	0.108
17	Turkey	0.087	0.085	0.059	0.196	0.137	0.096	0.660

#### 4. Computing the squared weighted comparability sequence for each alternative (Pi)

	Country	PR	DR	RR	HS	CA	RE	Pi
1	Bahrain	0.862	0.850	0.893	0.899	0.702	0.925	5.131
2	Cyprus	0.916	0.751	0.847	0.836	0.931	0.973	5.254
3	Israel	0.906	0.904	0.932	0.988	0.874	0.988	5.593
4	Kuwait	0.876	0.708	0.931	0.925	0.730	0.960	5.131
5	Oman	0.879	0.850	0.900	0.778	0.843	0.968	5.217
6	Qatar	0.863	0.850	0.939	0.907	0.877	0.976	5.412
7	Saudi Arabia	0.870	0.935	0.858	0.895	0.914	0.947	5.418
8	United Arab Emirates	0.895	0.787	0.877	0.617	0.874	1.000	5.050
9	Syria	0.506	0.000	0.000	0.460	0.000	0.703	1.668
10	Yemen	0.000	0.000	0.448	0.000	0.823	0.000	1.270
11	Jordan	0.853	0.805	0.896	0.907	0.906	0.933	5.299
12	Lebanon	0.742	0.893	0.950	0.667	0.843	0.878	4.973
13	Armenia	1.000	1.000	1.000	1.000	0.963	0.900	5.863
14	Azerbaijan	0.866	0.754	0.802	0.713	0.826	0.939	4.899
15	Georgia	0.939	0.941	0.888	0.738	1.000	0.909	5.415
16	Iraq	0.746	0.675	0.665	0.547	0.708	0.767	4.109
17	Turkey	0.936	0.860	0.902	0.967	0.968	0.939	5.572

Sum of PI	81.274	Sum of SI	88.800	$\lambda$	0.5
MAX	5.8628	MAX	5.863		
MIN	1.2703	MIN	0.022		

#### 5. Calculate the relative importance of the alternatives

	Country	SI	PI	Ka	Kb	Kc	K	Final Ranking
1	Bahrain	0.432	5.131	0.033	23.789	0.474	8.816	11
2	Cyprus	0.486	5.254	0.034	26.387	0.490	9.729	8
3	Israel	0.682	5.593	0.037	35.580	0.535	12.940	2
4	Kuwait	0.458	5.131	0.033	24.991	0.477	9.232	9
5	Oman	0.446	5.217	0.033	24.509	0.483	9.075	10

6	<b>Qatar</b>	0.558	5.412	0.035	29.774	0.509	10.917	6
7	<b>Saudi Arabia</b>	0.562	5.418	0.035	29.978	0.510	10.987	5
8	<b>United Arab Emirates</b>	0.413	5.050	0.032	22.848	0.466	8.481	12
9	<b>Syria</b>	0.022	1.668	0.010	2.313	0.144	0.972	17
10	<b>Yemen</b>	0.052	1.270	0.008	3.379	0.113	1.310	16
11	<b>Jordan</b>	0.492	5.299	0.034	26.698	0.494	9.841	7
12	<b>Lebanon</b>	0.367	4.973	0.031	20.707	0.455	7.731	13
13	<b>Armenia</b>	0.891	5.863	0.040	45.370	0.576	16.341	1
14	<b>Azerbaijan</b>	0.316	4.899	0.031	18.311	0.445	6.892	14
15	<b>Georgia</b>	0.582	5.415	0.035	30.880	0.511	11.298	4
16	<b>Iraq</b>	0.108	4.109	0.025	8.170	0.360	3.269	15
17	<b>Turkey</b>	0.660	5.572	0.037	34.571	0.531	12.589	3

### 3.2. Health security performance ranking results of WA countries (Case - 2021)

1. Construct the decision matrix (X)							
	Country	PR	DR	RR	HS	CA	RE
1	Bahrain	28.6	37.2	33.5	41.2	21.9	55.2
2	Cyprus	44.1	25	34	32.3	52.8	62.9
3	Israel	41.6	46.7	44.4	55.2	30.9	64.2
4	Kuwait	27.2	17.9	40.3	42.5	29.2	63.9
5	Oman	35.4	33.5	31.7	28.6	41.5	64.2
6	Qatar	36.4	39.7	55.2	42.4	46.7	71.7
7	Saudi Arabia	33.4	52.1	32.7	40.7	49.5	61.2
8	United Arab Emirates	39	22.6	37.5	19.5	43.9	74.7
9	Syria	12.9	4.2	18	13.4	24.5	27.4
10	Yemen	0.8	4.2	17.5	12	37.5	24.9
11	Jordan	30.3	32.5	41.8	47.1	48.1	57.1
12	Lebanon	8.6	38.9	52	21.6	40.1	39
13	Armenia	79.3	69.6	56.3	58.8	59.2	47.6
14	Azerbaijan	32.6	21.7	32.4	24.1	38.4	59.3
15	Georgia	55.2	65.1	46.1	33.7	63.9	51.6
16	Iraq	15.4	24.2	21.3	20.2	32.8	30.1
17	Turkey	51.1	41.4	36.6	53.9	59.7	57.2
2. Calculate the normalized values of alternatives (N).							
	Country	PR	DR	RR	HS	CA	RE
1	Bahrain	0.35414	0.50459	0.41237	0.62393	0.00000	0.60843
2	Cyprus	0.55159	0.31804	0.42526	0.43376	0.73571	0.76305
3	Israel	0.51975	0.64985	0.69330	0.92308	0.21429	0.78916
4	Kuwait	0.33631	0.20948	0.58763	0.65171	0.17381	0.78313
5	Oman	0.44076	0.44801	0.36598	0.35470	0.46667	0.78916
6	Qatar	0.45350	0.54281	0.97165	0.64957	0.59048	0.93976
7	Saudi Arabia	0.41529	0.73242	0.39175	0.61325	0.65714	0.72892

8	United Arab Emirates	0.48662	0.28135	0.51546	0.16026	0.52381	1.00000
9	Syria	0.15414	0.00000	0.01289	0.02991	0.06190	0.05020
10	Yemen	0.00000	0.00000	0.00000	0.00000	0.37143	0.00000
11	Jordan	0.37580	0.43272	0.62629	0.75000	0.62381	0.64659
12	Lebanon	0.09936	0.53058	0.88918	0.20513	0.43333	0.28313
13	Armenia	1.00000	1.00000	1.00000	1.00000	0.88810	0.45582
14	Azerbaijan	0.40510	0.26758	0.38402	0.25855	0.39286	0.69076
15	Georgia	0.69299	0.93119	0.73711	0.46368	1.00000	0.53614
16	Iraq	0.18599	0.30581	0.09794	0.17521	0.25952	0.10442
17	Turkey	0.64076	0.56881	0.49227	0.89530	0.90000	0.64859
Wj		0.13799	0.18575	0.15716	0.18891	0.17380	0.15639

3. Calculate the sum the weighted comparability sequence (Si)								
	Country	PR	DR	RR	HS	CA	RE	Si
1	Bahrain	0.049	0.094	0.065	0.118	0.000	0.095	0.420
2	Cyprus	0.076	0.059	0.067	0.082	0.128	0.119	0.531
3	Israel	0.072	0.121	0.109	0.174	0.037	0.123	0.636
4	Kuwait	0.046	0.039	0.092	0.123	0.030	0.122	0.453
5	Oman	0.061	0.083	0.058	0.067	0.081	0.123	0.473
6	Qatar	0.063	0.101	0.153	0.123	0.103	0.147	0.688
7	Saudi Arabia	0.057	0.136	0.062	0.116	0.114	0.114	0.599
8	United Arab Emirates	0.067	0.052	0.081	0.030	0.091	0.156	0.478
9	Syria	0.021	0.000	0.002	0.006	0.011	0.008	0.048
10	Yemen	0.000	0.000	0.000	0.000	0.065	0.000	0.065
11	Jordan	0.052	0.080	0.098	0.142	0.108	0.101	0.582
12	Lebanon	0.014	0.099	0.140	0.039	0.075	0.044	0.410
13	Armenia	0.138	0.186	0.157	0.189	0.154	0.071	0.895
14	Azerbaijan	0.056	0.050	0.060	0.049	0.068	0.108	0.391
15	Georgia	0.096	0.173	0.116	0.088	0.174	0.084	0.730
16	Iraq	0.026	0.057	0.015	0.033	0.045	0.016	0.192
17	Turkey	0.088	0.106	0.077	0.169	0.156	0.101	0.698
4. Computing the squared weighted comparability sequence for each alternative (Pi)								
	Country	PR	DR	RR	HS	CA	RE	Pi
1	Bahrain	0.867	0.881	0.870	0.915	0.000	0.925	4.457
2	Cyprus	0.921	0.808	0.874	0.854	0.948	0.959	5.364
3	Israel	0.914	0.923	0.944	0.985	0.765	0.964	5.495
4	Kuwait	0.860	0.748	0.920	0.922	0.738	0.962	5.151
5	Oman	0.893	0.861	0.854	0.822	0.876	0.964	5.270
6	Qatar	0.897	0.893	0.995	0.922	0.913	0.990	5.609
7	Saudi Arabia	0.886	0.944	0.863	0.912	0.930	0.952	5.486
8	United Arab Emirates	0.905	0.790	0.901	0.708	0.894	1.000	5.198
9	Syria	0.773	0.000	0.505	0.515	0.617	0.626	3.035

10	Yemen	0.000	0.000	0.000	0.000	0.842	0.000	0.842
11	Jordan	0.874	0.856	0.929	0.947	0.921	0.934	5.461
12	Lebanon	0.727	0.889	0.982	0.741	0.865	0.821	5.025
13	Armenia	1.000	1.000	1.000	1.000	0.980	0.884	5.864
14	Azerbaijan	0.883	0.783	0.860	0.775	0.850	0.944	5.094
15	Georgia	0.951	0.987	0.953	0.865	1.000	0.907	5.663
16	Iraq	0.793	0.802	0.694	0.720	0.791	0.702	4.502
17	Turkey	0.940	0.901	0.895	0.979	0.982	0.935	5.631
Sum of PI		83.148	Sum of SI		91.440	$\lambda$		0.5
MAX		5.8640	MAX		5.864			
MIN		0.8419	MIN		0.048			
5. Calculate the relative importance of the alternatives								
	Country	SI	PI	Ka	Kb	Kc	K	Final Ranking
1	Bahrain	0.420	4.457	0.028	14.135	0.416	5.407	14
2	Cyprus	0.531	5.364	0.034	17.541	0.503	6.694	8
3	Israel	0.636	5.495	0.035	19.909	0.523	7.537	5
4	Kuwait	0.453	5.151	0.032	15.654	0.478	6.009	11
5	Oman	0.473	5.270	0.033	16.208	0.490	6.216	9
6	Qatar	0.688	5.609	0.036	21.139	0.537	7.980	4
7	Saudi Arabia	0.599	5.486	0.035	19.111	0.519	7.257	6
8	United Arab Emirates	0.478	5.198	0.033	16.228	0.484	6.216	10
9	Syria	0.048	3.035	0.018	4.606	0.263	1.906	16
10	Yemen	0.065	0.842	0.005	2.357	0.077	0.911	17
11	Jordan	0.582	5.461	0.035	18.723	0.515	7.118	7
12	Lebanon	0.410	5.025	0.031	14.597	0.463	5.626	12
13	Armenia	0.895	5.864	0.039	25.795	0.576	9.635	1
14	Azerbaijan	0.391	5.094	0.031	14.275	0.468	5.519	13
15	Georgia	0.730	5.663	0.037	22.070	0.545	8.311	2
16	Iraq	0.192	4.502	0.027	9.394	0.400	3.740	15
17	Turkey	0.698	5.631	0.036	21.375	0.540	8.065	3

#### 4. K-Means Clustering of Western Asian Countries by D-CRITIC-CoCoSo Health Security Performance Scores

##### 4.1. Health security performance clustering results of WA countries (Case - 2019)

Output for FIVE Clusters/Segments				
Grade ID	Ci	Number	%	SSE/Segment
1	16.34088106	1	5.9%	0.0
2	11.74629479	5	29.4%	3.6
3	9.338464734	5	29.4%	0.8
4	7.701452074	3	17.6%	1.3
5	1.85026015	3	17.6%	3.1

Clustering results			
Country	Income group	Segment	Grade
Bahrain	HIC	1	3
Cyprus	HIC	1	3
Israel	HIC	4	2
Kuwait	HIC	1	3
Oman	HIC	1	3
Qatar	HIC	4	2
Saudi Arabia	HIC	4	2
United Arab Emirates	HIC	5	4
Syria	LIC	2	5
Yemen	LIC	2	5
Jordan	LMC	1	3
Lebanon	LMC	5	4
Armenia	UMC	3	1
Azerbaijan	UMC	5	4
Georgia	UMC	4	2
Iraq	UMC	2	5
Turkey	UMC	4	2

#### 4.2 Health security performance clustering results of WA countries (Case - 2021)

Output for FIVE Clusters/Segments				
Grade ID	Ci	Number	%	SSE/Segment
1	8.497822908	4	23.5%	1.8
2	7.151423139	4	23.5%	0.4
3	5.83221185	6	35.3%	0.6
4	3.739535024	1	5.9%	0.0
5	1.408875127	2	11.8%	0.5
Clustering results				
Country	Income group	Segment	Grade	
Bahrain	HIC	1	3	
Cyprus	HIC	3	2	
Israel	HIC	3	2	
Kuwait	HIC	1	3	
Oman	HIC	1	3	
Qatar	HIC	5	1	
Saudi Arabia	HIC	3	2	
United Arab Emirates	HIC	1	3	
Syria	LIC	4	5	
Yemen	LIC	4	5	
Jordan	LMC	3	2	
Lebanon	LMC	1	3	
Armenia	UMC	5	1	
Azerbaijan	UMC	1	3	
Georgia	UMC	5	1	
Iraq	UMC	2	4	
Turkey	UMC	5	1	

