

# GBD PROFILE: LESOTHO

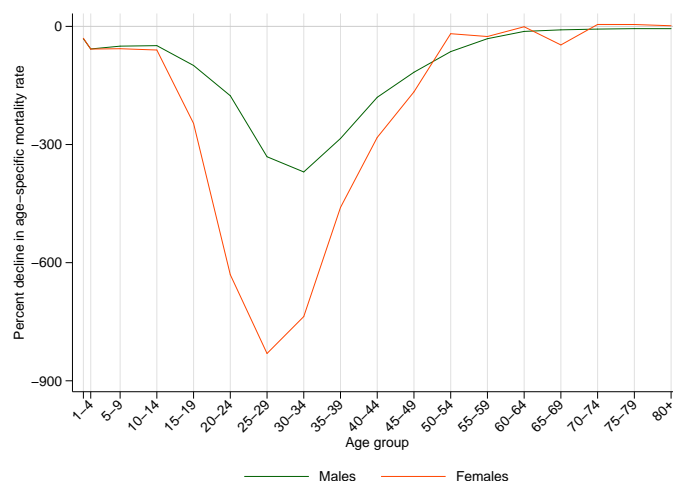
## GLOBAL BURDEN OF DISEASES, INJURIES, AND RISK FACTORS STUDY 2010

The Global Burden of Disease Study 2010 (GBD 2010) is a collaborative project of nearly 500 researchers in 50 countries led by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. It is the largest systematic scientific effort in history to quantify levels and trends of health loss due to diseases, injuries, and risk factors. GBD serves as a global public good to inform evidence-based policymaking and health systems design.

### PROFILE OVERVIEW

- In terms of the number of years of life lost (YLLs) due to premature death in Lesotho, HIV/AIDS, lower respiratory infections, and diarrheal diseases were the highest ranking causes in 2010.
- Of the 25 most important causes of burden, as measured by disability-adjusted life years (DALYs), syphilis showed the largest decrease, falling by 28% from 1990 to 2010.
- The leading risk factor in Lesotho is suboptimal breastfeeding.

Percent decline in age-specific mortality rate by sex from 1990-2010 in Lesotho



### ALL-CAUSE MORTALITY RATE

- This chart shows the change in mortality rate at every age range. The points above 0 on the chart indicate positive declines in the all-cause mortality rate, while points below 0 indicate an increase in mortality rate between 1990 and 2010.
- The greatest reductions in all-cause mortality rate were experienced by females aged 70-74 years (5%). Females aged 25-29 years saw the largest increase in mortality rate (831%).

### CAUSES OF PREMATURE DEATH

Years of life lost (YLLs) quantify premature mortality by weighting younger deaths more than older deaths.

Ranks for top 25 causes of YLLs 1990-2010, Lesotho

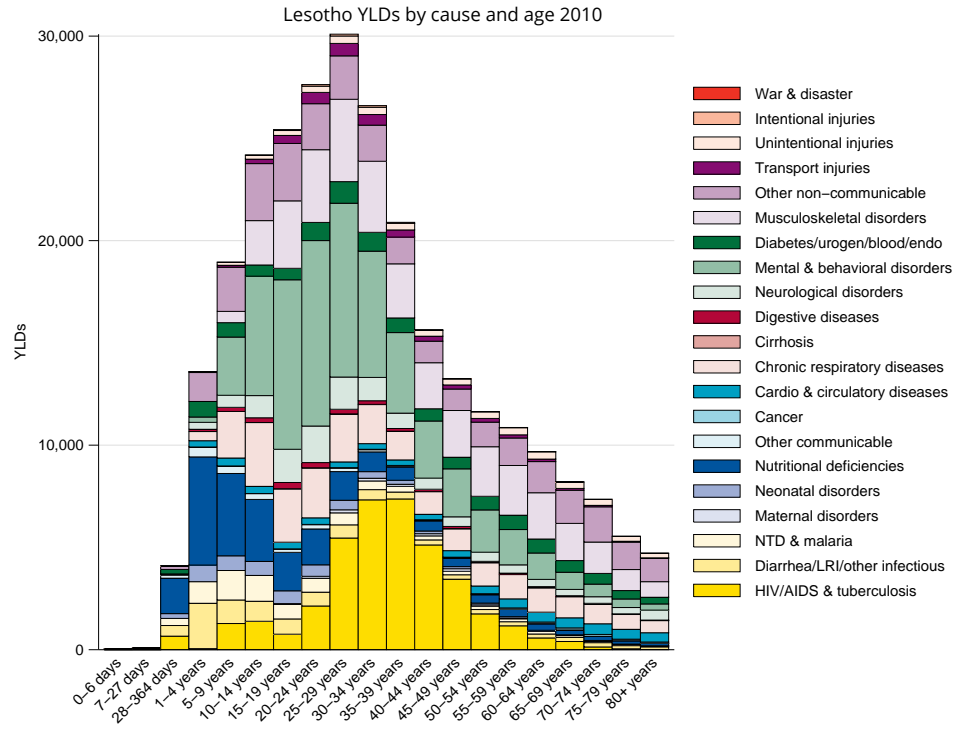
# YLLs in thousands (% of total)	Rank and disorder 1990	Rank and disorder 2010	# YLLs in thousands (% of total)	% change
136 (17.5%)	1 Diarrheal diseases	1 HIV/AIDS	645 (35.9%)	7,403
111 (14.3%)	2 Lower respiratory infections	2 Lower respiratory infections	164 (9.1%)	48
55 (7.0%)	3 Tuberculosis	3 Diarrheal diseases	151 (8.4%)	11
40 (5.1%)	4 Preterm birth complications	4 Interpersonal violence	128 (7.1%)	350
30 (3.9%)	5 Interpersonal violence	5 Tuberculosis	90 (5.0%)	67
25 (3.2%)	6 Stroke	6 Preterm birth complications	51 (2.9%)	26
25 (3.2%)	7 Neonatal encephalopathy	7 Stroke	36 (2.0%)	44
22 (2.8%)	8 Congenital anomalies	8 Congenital anomalies	32 (1.8%)	44
15 (1.9%)	9 Syphilis	9 Neonatal encephalopathy	32 (1.8%)	27
15 (2.0%)	10 Mechanical forces	10 Mechanical forces	29 (1.6%)	112
12 (1.5%)	11 Ischemic heart disease	11 Maternal disorders	25 (1.4%)	157
14 (1.8%)	12 Measles	12 Diabetes	19 (1.1%)	78
12 (1.6%)	13 Neonatal sepsis	13 Ischemic heart disease	16 (0.9%)	37
11 (1.4%)	14 Diabetes	14 Neonatal sepsis	16 (0.9%)	31
10 (1.2%)	15 Meningitis	15 Meningitis	15 (0.8%)	53
10 (1.2%)	16 Maternal disorders	16 COPD	13 (0.7%)	56
9 (1.2%)	17 HIV/AIDS	17 Fire	13 (0.7%)	90
9 (1.1%)	18 COPD	18 Road injury	12 (0.7%)	252
9 (1.1%)	19 Protein-energy malnutrition	19 Syphilis	11 (0.6%)	-28
7 (0.9%)	20 Fire	20 Hypertensive heart disease	10 (0.5%)	52
9 (1.1%)	21 Typhoid fevers	21 Protein-energy malnutrition	10 (0.6%)	16
6 (0.8%)	22 Hypertensive heart disease	22 Cardiomyopathy	9 (0.5%)	44
6 (0.7%)	23 Cardiomyopathy	23 Epilepsy	8 (0.5%)	49
6 (0.7%)	24 Asthma	24 Drowning	8 (0.5%)	78
5 (0.7%)	25 Other cardio & circulatory	25 Typhoid fevers	9 (0.5%)	11
	26 Epilepsy	28 Asthma		
	27 Drowning	29 Other cardio & circulatory		
	30 Road injury	30 Measles		

This chart shows the change in the top 25 causes of YLLs due to premature mortality from 1990 to 2010. Solid lines indicate a cause has moved up in rank or stayed the same. Broken lines indicate a cause has moved down in rank. The causes are color coded by blue for non-communicable diseases, green for injuries, and red for communicable, maternal, neonatal, and nutritional causes of death.

## YEARS LIVED WITH DISABILITY (YLDs)

Years lived with disability (YLDs) are estimated by weighting the prevalence of different conditions based on severity. The top five leading causes of YLDs in Lesotho are HIV/AIDS, major depressive disorder, iron-deficiency anemia, low back pain, and chronic obstructive pulmonary disease.

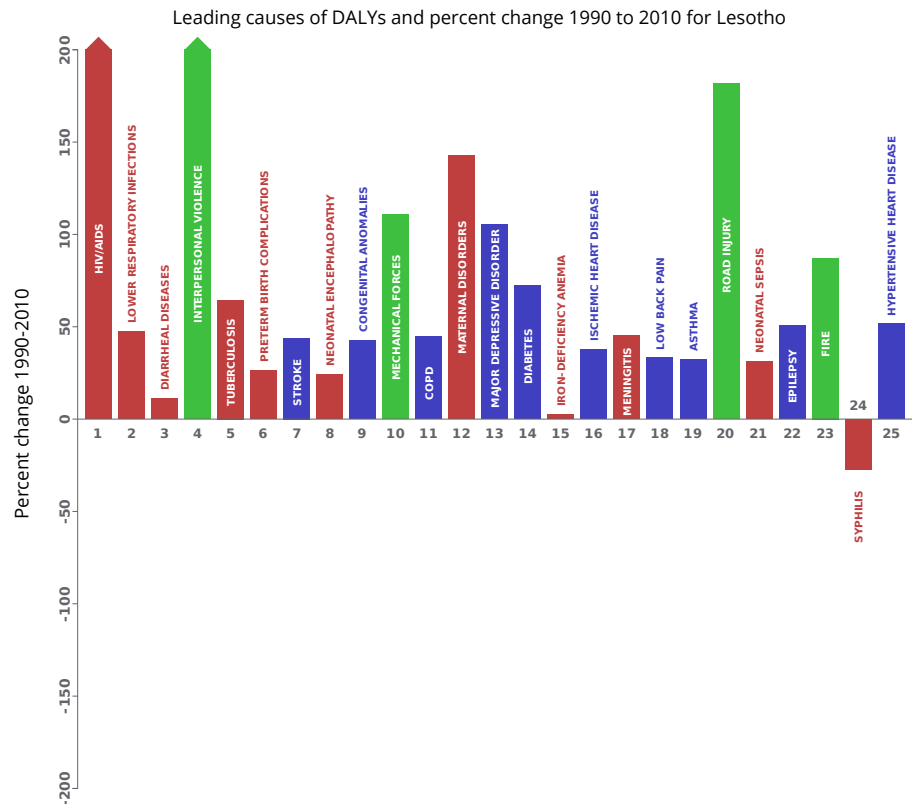
The size of the colored portion in each bar represents the number of YLDs attributable to each cause. The height of each bar shows which age groups had the most YLDs in 2010. The causes are aggregated. For example, musculoskeletal disorders include low back pain and neck pain.



## DISABILITY-ADJUSTED LIFE YEARS (DALYs)

Disability-adjusted life years (DALYs) quantify both premature mortality (YLLs) and disability (YLDs) within a population. In Lesotho, the top three causes of DALYs in 2010 were HIV/AIDS, lower respiratory infections, and diarrheal diseases. Two causes that appeared in the 10 leading causes of DALYs in 2010 and not 1990 were HIV/AIDS and exposure to mechanical forces.

The top 25 causes of DALYs are ranked from left to right in order of the number of DALYs they contributed in 2010. Bars going up show the percent by which DALYs have increased since 1990. Bars going down show the percent by which DALYs have decreased. Globally, non-communicable diseases and injuries are generally on the rise, while communicable, maternal, neonatal, and nutritional causes of DALYs are generally on the decline.

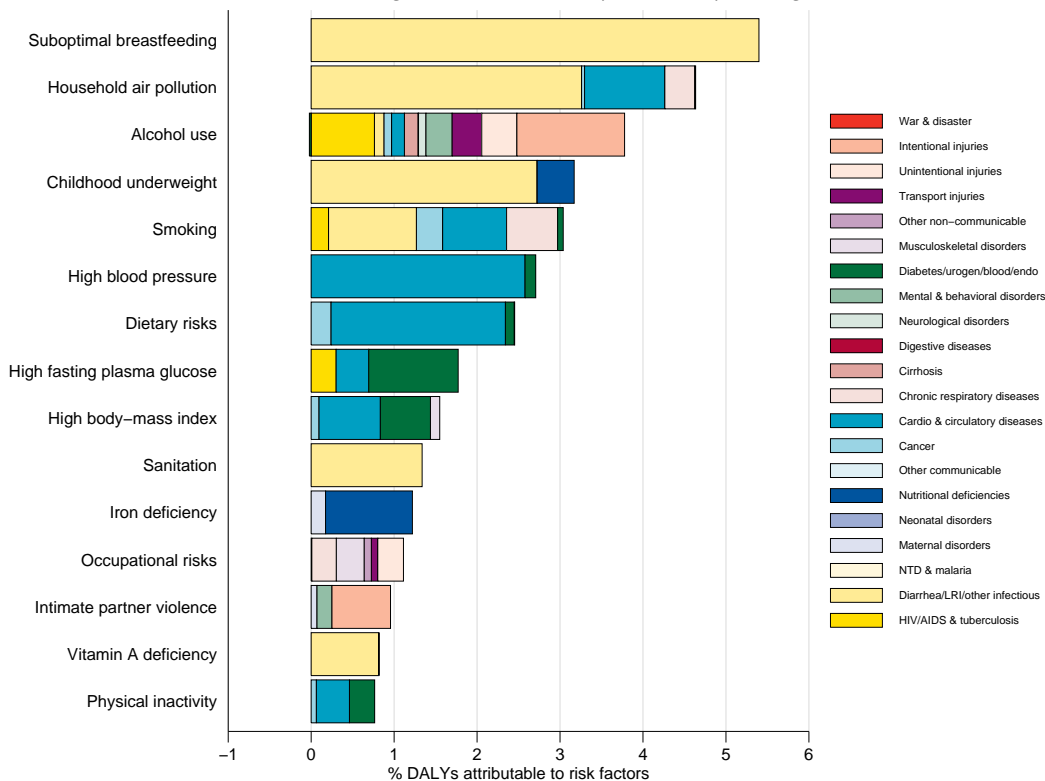


## RISK FACTORS

Overall, the three risk factors that account for the most disease burden in Lesotho are suboptimal breastfeeding, household air pollution from solid fuels, and alcohol use. The leading risk factors for children under 5 and adults aged 15-49 years were suboptimal breastfeeding and alcohol use, respectively, in 2010.

The graph shows the top 15 risk factors for Lesotho. The colored portion of each bar represents the specific diseases attributable to that risk factor while bar size represents the percentage of DALYs linked to specific risk factors.

Burden of disease attributable to 15 leading risk factors in 2010, expressed as a percentage of Lesotho DALYs



## COUNTRY BENCHMARKING OF BURDEN OF DISEASE

Understanding the relative performance of Lesotho against other comparator countries provides key insight into public health successes and areas where Lesotho might be falling behind. The table identifies Lesotho's rank across 14 other comparator countries, selected and ordered by income per capita, for five metrics of interest, with 1 indicating the best rank and 15 indicating the worst rank.

- Age-standardized rates are used to make meaningful comparisons across time by adjusting for changes in population size and age structure.
- Life expectancy incorporates mortality, and health-adjusted life expectancy further incorporates years lived in less than ideal health.
- In 2010, Lesotho ranked 14th for age-standardized death rate and 14th for age-standardized YLL rate.

Age-standardized death rates, YLL rates, YLD rates, and life expectancy at birth and health-adjusted life expectancy at birth for 1990 and 2010, both sexes combined																				
Country	Age-standardized death rate (per 100,000)				Age-standardized YLL rate (per 100,000)				Age-standardized YLD rate (per 100,000)				Life expectancy at birth				Health-adjusted life expectancy at birth			
	1990		2010		1990		2010		1990		2010		1990		2010		1990		2010	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	LE	Rank	LE	Rank	HALE	Rank	HALE	Rank
The Gambia	1,315	8	1,109	8	54,039	9	41,302	9	14,365	6	13,291	6	57.2	9	62.2	9	48.4	9	53.2	9
Kenya	1,092	2	1,013	5	39,731	2	36,153	6	13,184	3	12,884	3	63	2	64.8	6	53.8	2	55.5	5
Timor-Leste	1,223	4	872	4	45,244	4	26,770	4	14,698	9	13,715	9	60.5	5	68.7	4	50.7	5	58	4
Chad	1,508	12	1,389	11	67,610	13	58,839	12	15,080	14	14,364	13	52.5	13	55.5	12	43.9	13	46.8	13
Benin	1,312	7	1,080	7	58,713	11	38,726	7	15,237	15	13,830	11	55.9	11	63.4	7	46.6	11	53.7	8
Ghana	1,185	3	1,030	6	45,628	5	35,128	5	14,555	8	13,298	7	60.5	4	64.9	5	50.9	4	55.3	6
Bangladesh	1,295	6	864	3	49,258	6	26,361	3	14,743	10	13,206	5	58.9	6	69	3	49.2	8	58.4	3
<b>Lesotho</b>	<b>1,316</b>	<b>9</b>	<b>2,130</b>	<b>14</b>	<b>43,569</b>	<b>3</b>	<b>85,888</b>	<b>14</b>	<b>13,503</b>	<b>4</b>	<b>15,483</b>	<b>14</b>	<b>60.9</b>	<b>3</b>	<b>47.4</b>	<b>14</b>	<b>52</b>	<b>3</b>	<b>40.2</b>	<b>14</b>
Zambia	1,722	15	1,533	13	73,053	15	57,620	11	15,030	12	13,732	10	50.6	15	55.8	11	42.7	15	47.8	11
North Korea	895	1	832	2	25,915	1	21,755	1	10,569	1	10,347	1	68.9	1	70.8	1	60.7	1	62.4	1
Haiti	1,717	14	3,321	15	61,823	12	137,295	15	15,059	13	16,428	15	54.1	12	37.2	15	45.7	12	31.8	15
Tanzania	1,357	10	1,137	9	55,603	10	43,461	10	14,553	7	14,177	12	56.6	10	61.7	10	47.8	10	52.2	10
Nepal	1,285	5	832	1	49,745	7	26,361	2	13,660	5	12,959	4	58.8	7	69.2	2	49.8	6	58.8	2
Comoros	1,439	11	1,223	10	52,340	8	38,959	8	13,050	2	12,879	2	57.5	8	62.8	8	49.5	7	54	7
Burkina Faso	1,521	13	1,396	12	68,852	14	59,507	13	14,862	11	13,409	8	52.1	14	55.2	13	43.8	14	47.1	12

## COUNTRY BENCHMARKING OF BURDEN OF DISEASE, CONTINUED

This figure shows the rank of Lesotho relative to the same comparator countries for the leading causes of DALYs in 1990 (top) and 2010 (bottom).

- The columns are ordered by the absolute number of DALYs in Lesotho for that particular year, with greatest burden on the left.
- The numbers indicate the rank across countries for each cause in terms of age-standardized DALY rates, with 1 as the best performance and 15 as the worst.

Ranking of leading age-standardized rates of disability-adjusted life years (DALYs) relative to comparator countries in 1990																									
Country	Diarrheal diseases	Lower respiratory infections	Tuberculosis	Preterm birth complications	Interpersonal violence	Neonatal encephalopathy	Stroke	Congenital anomalies	Iron-deficiency anemia	COPD	Mechanical forces	Syphilis	Diabetes	Ischemic heart disease	Major depressive disorder	Measles	Low back pain	Asthma	Neonatal sepsis	Meningitis	Maternal disorders	HIV/AIDS	Protein-energy malnutrition	Epilepsy	Fire
The Gambia	6	13	8	5	12	3	13	7	12	11	3	6	8	12	15	11	11	12	14	10	12	6	10	13	9
Kenya	2	8	4	4	2	4	5	2	6	2	1	5	4	4	6	8	4	4	8	8	3	9	9	6	5
Timor-Leste	5	9	13	11	5	2	10	14	5	8	12	4	10	15	13	13	5	14	2	6	8	1	5	2	2
Chad	15	14	10	10	7	7	6	3	14	7	11	12	3	5	10	14	13	8	12	13	13	8	14	11	11
Benin	7	12	2	13	9	12	7	6	13	6	6	7	6	7	7	15	10	7	13	12	14	12	13	14	10
Ghana	3	4	3	9	6	9	8	4	10	3	2	2	9	8	11	12	1	2	15	9	4	11	6	9	3
Bangladesh	10	3	5	15	3	14	1	10	8	14	13	8	2	1	2	5	15	10	4	1	5	1	8	4	4
<b>Lesotho</b>	<b>9</b>	<b>2</b>	<b>15</b>	<b>8</b>	<b>15</b>	<b>8</b>	<b>12</b>	<b>11</b>	<b>4</b>	<b>12</b>	<b>14</b>	<b>9</b>	<b>14</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>13</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>7</b>	<b>2</b>	<b>7</b>	<b>8</b>
Zambia	8	7	12	1	13	11	9	5	2	5	7	13	13	10	14	4	3	3	6	14	7	15	15	12	15
North Korea	1	1	1	2	4	1	11	15	1	13	4	1	1	11	3	1	8	1	1	2	1	3	1	1	1
Haiti	13	5	14	7	14	10	15	8	15	1	8	14	15	14	8	2	2	9	11	11	11	10	3	5	6
Tanzania	11	10	9	3	11	6	4	1	9	4	5	11	7	3	5	6	12	5	7	5	10	13	11	8	12
Nepal	12	11	11	12	1	15	3	13	7	15	15	10	5	9	1	7	14	15	5	3	6	5	4	3	7
Comoros	4	6	6	14	10	13	14	12	3	10	9	15	12	13	9	10	9	6	9	7	15	4	12	10	14
Burkina Faso	14	15	7	6	8	5	2	9	11	9	10	3	11	2	12	9	7	11	10	15	9	14	7	15	13
Ranking of leading age-standardized rates of disability-adjusted life years (DALYs) relative to comparator countries in 2010																									
Country	HIV/AIDS	Lower respiratory infections	Diarrheal diseases	Interpersonal violence	Tuberculosis	Preterm birth complications	Stroke	Neonatal encephalopathy	Congenital anomalies	Mechanical forces	COPD	Maternal disorders	Major depressive disorder	Diabetes	Iron-deficiency anemia	Ischemic heart disease	Meningitis	Low back pain	Asthma	Road injury	Neonatal sepsis	Epilepsy	Fire	Syphilis	Hypertensive heart disease
The Gambia	9	12	6	10	5	8	8	4	10	3	7	11	8	9	11	7	11	10	8	12	14	9	6	7	7
Kenya	12	10	10	5	9	5	4	3	4	5	2	6	10	2	7	2	9	4	4	8	9	6	8	8	1
Timor-Leste	1	4	4	6	14	9	9	2	15	10	9	8	13	5	3	15	4	5	14	2	2	3	2	3	12
Chad	11	15	15	7	12	13	5	9	13	8	15	9	8	14	4	14	13	7	13	13	15	12	14	2	
Benin	7	11	5	8	4	11	6	7	6	2	4	10	4	7	13	8	12	11	6	9	12	11	7	5	4
Ghana	10	6	3	2	2	7	10	6	5	1	6	4	6	10	9	13	10	1	2	7	15	10	3	2	8
Bangladesh	3	2	2	3	3	15	1	15	8	11	14	2	3	6	6	3	1	15	11	1	3	5	4	6	10
<b>Lesotho</b>	<b>15</b>	<b>13</b>	<b>13</b>	<b>15</b>	<b>15</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>13</b>	<b>13</b>	<b>14</b>	<b>14</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>15</b>	<b>3</b>	<b>4</b>	<b>7</b>	<b>14</b>	<b>10</b>	<b>14</b>
Zambia	14	8	11	13	13	2	11	11	3	7	5	7	11	12	2	10	13	3	3	11	7	12	13	15	13
North Korea	4	1	1	4	1	1	12	1	13	4	12	1	1	1	1	12	2	8	1	5	1	1	1	1	5
Haiti	6	5	12	14	11	6	15	8	11	8	1	5	7	15	15	14	8	2	13	6	11	4	10	11	15
Tanzania	13	7	7	12	8	3	2	10	1	6	3	14	15	4	10	1	5	12	5	10	6	8	9	12	6
Nepal	5	3	9	1	7	4	3	14	2	14	15	3	2	3	5	11	3	14	12	4	5	2	5	9	9
Comoros	2	9	8	11	10	12	13	12	7	12	11	12	12	11	8	6	7	9	9	14	8	13	11	13	11
Burkina Faso	8	14	14	9	6	10	7	5	12	9	10	9	5	13	12	9	15	7	10	15	10	14	15	4	3
Ranking Legend	1 - 3			4 - 7				8 - 11					12 - 15												