

Technical Report 2022-02

# Human Development Index to support the Kuwait National Development Plan

2022



مركز الكويت للسياسات العامة  
Kuwait Public Policy Center



Authored by Sungsoo Chun for KPPC.

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**Contact Details:**

Kuwait Public Policy Center

kppc@scpd.gov.kw

Tel: 22452359

The Kuwait Public Policy Center

General Secretariat of the Supreme Council for Planning and Development

State of Kuwait

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## Summary

The main objective of this report is to explore ways to help achieve the Kuwait Vision 2035 and implement the KNDP. The HDI published by the UNDP is composed of indicators that are quite consistent with the contents of the KNDP in all respects. This report aims to support the State of Kuwait to improve its Human Development Indexes, leading to achieving the Kuwait Vision 2035. Since the indicators of HDI are precise, they are beneficial in strategically establishing the KNDP's action plan. Therefore, we analyzed the interrelationship between the detailed indicators of HDI and the policies and programs of KNDP 2020-2025.

Kuwait's Human Development Index is among the "very highly developed group, but it ranks 3rd from the bottom among 66 countries. And during the last five years, from 2014 to 2019, its ranking retreated five rungs. We analyzed the sub-indicators of the HDIs to figure out the effective factors to improve the Indexes in the short period, based on comparing the trends of Gulf Cooperation Council (GCC) Countries'.

### Ten challenges in human development indexes:

- Factors to lead to education inequality
- Huge amounts of the material footprint production
- Significant gender gaps in male's schooling years, male's short life expectancy, and female's low GNI
- Issues on gender inequality, including maternal health, secondary education, labor markets for females, and share seats in parliament
- Issues on the quality of human development, including ill healthy lives and untrained primary teachers
- High unemployment issues among females
- Women's empowerment issues
- Environmental issues, including land degradation, considerable amounts of domestic material consumption, and household and ambient population
- Low research and development expenditures
- The growing burden for the aging population

### Thirteen recommendations for the strategic approaches:

- Develop strategies for women's contributions to labor markets.
- Develop education strategies interlinked to labor markets.
- Implement strategies to increase trained teachers in primary education.
- Shift paradigm in health strategy from treatment to health promotion.
- Develop strategies to enhance maternal health.
- Formulate strategies to improve household and building's air quality and reduce air pollution.
- Develop strategies to share seats in the parliament and local governments.
- Start healthy marriage education programs from an early age.
- Develop strategies to expand the forest through the related projects.

- Develop strategies for active aging programs.
- Develop steps to reduce the amount of carbon dioxide emission and material footprint.
- Develop strategic steps to increase research and development investment.
- Formulate a strategic action plan to enhance the Human Development Indexes.

### Scenarios and conclusions

HDI's exactly match the contents of 8 multi-programs of KNDP 2020-2025. In consideration of the case of considering strategic improvement of HDI's in the KNDP's action plan, four scenarios were set up in stages. By 2028, the year of the second stage, the global positioning target of Kuwait Vision 2035 can be achieved up to the level of 35% (48th), and by 2035 when the fourth stage scenario is completed, there is a possibility that HDI will reach the top 40 in the world ranking. In addition, it is expected that the growth of HDI will significantly contribute to the achievement of the KNDP goal.

## Abbreviations

4KMP: 4th Kuwait Master Plan

ESI: Environmental Sustainability Indexes

FDI: Foreign Direct Investment

GCC: Gulf Cooperation Council

GCI: Global Competitiveness Index

GDI: Gender Human Development Index

GII: Gender Inequality Index

GNI: Gross National Income

HDI: Human Development Index

ICT: Information and Communication Technology

IHDI: Inequality-Adjusted Human Development Index

KNDP: Kuwait National Development

KPI: Key Performance Indicator

MPI: Multidimensional Poverty Index

NEZ: Northern Economic Zone

PHDI: Planetary pressure-adjusted Human Development Index

PISA: Programme for International Students' Assessment

PPP: Public-Private Partnership

RLI: Red List Index

R&D: Research and Development

SME: Small and Medium Enterprise

SSI: Socioeconomic Sustainability Indexes

STEM: Science, Technology, Engineering, and Mathematics

UAE: United Arab Emirates

UNDP: United Nations Development Programmes

UNOCHA: United Nations Office for the Coordination of Humanitarian Affairs

WEI: Women's Empowerment Indexes

# 1. Rationale and purpose

"Global Positioning" is one of seven pillars in the Kuwait Vision 2035, but the rest of six pillars are closely linked to Global Position. Actually, all the seven pillars are interconnected and interdependent.

One of the popular and worldwide indexes to measure the countries' development status is the Human Development Index (HDI), which is measured by United Nations Development Programmes (UNDP) annually. Since 1990, UNDP offered HDI as a forward-looking alternative to Gross Domestic Product (GDP), ranking all countries by whether people had the freedom and opportunity to live a life they valued (UNDP, 2020). Since then, HDI has been widely used and contributed toward the quality of the human capital component of a nation's competitiveness and its' current development status (Ivanova, Arcelus, Srinivasan, 1999), have been accepted as one of the most widely implemented instruments (Miralamli P. (2018).

Nine Indexes, Human Development Index (HDI), Inequality-Adjusted HDI (IHDI), Planetary pressure-adjusted Human Development Index (PHDI), Women's Empowerment Indexes (WEI), Gender Inequality Index (GII), Gender Human Development Index (GDI), Multidimensional Poverty Index (MPI), Environmental Sustainability Indexes (ESI), and Socioeconomic Sustainability Indexes (SSI) that UNDP reported in 2020 are embracing directly or indirectly the seven pillars of the Kuwait Vision 2035. The UNDP Indexes, which are composed of 171 sub-indicators in 17 sections, measure the countries' development status, potentially leading to the holistically developed status, contributing fundamentally to the achievement of the Kuwait Vision 2035: sustainable diversified economy; effective civil service; sustainable living environment; developed infrastructure; high-quality healthcare; creative human capital; and global positioning.

Kuwait is within the category of the "High Human Development" countries group of 66 countries,<sup>1</sup> but the country's HDI is 0.806 and 64th in 2019, nearly the lowest among GCC countries. Ironically, Oman's Gross National Income (GNI) is less than half (\$25,944) than Kuwait's (\$58,590), the country's HDI is 0.813 and 60th ranking, which is higher than Kuwait (UNDP, 2020).

Because the 171 indicators of Indexes being measured by UNDP are crossly interlinked, the impacts of the improvement of any single or couple of indicators are sometimes meager. Still, if we approach strategically to improve indexes' values, we can enhance those values quickly. Some indicators require a more extended period to enhance, but some require a relatively short period. And If we fill out the missing data correctly, which is currently unreported, some of the indexes are expected

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<sup>1</sup> The cutoff points are HDI of less than 0.550 for low human development, 0.550–0.699 for medium human development, 0.700–0.799 for high human development, and 0.800 or greater for very high human development.



enhanced. Thus, strategically managing the indicators in efficient ways is critically important to improving the indexes.

The Kuwait Vision 2035 is a milestone for the sustainable development of the Kuwait. To achieve the Kuwait Vision 2035, Kuwait National Development Plan (KNDP) has been formulated which is a long-term plan launched in 2010 and has been updated in five years. The KNPD consists of seven pillars: Public Administration, Economy, Human Capital, Environment, Health, Infrastructure, Global Positioning. The main focus of each five-year plan is following:

- 2010-2015 LEGISLATURE ACTIVITIES
- 2015-2020 INFRASTRUCTURE BUILDING
- 2020-2025 PRIVATE SECTOR ENGAGEMENT
- 2025-2030 KNOWLEDGE-BASED ECONOMY
- 2030-2035 TOWARDS SMART KUWAIT

The contents of KNDP are closely interlinked with HDI. Therefore, it is essential to find efficient ways to enhance the indexes by cutting edge methods with scenarios for reaching the goals of "Global Positioning" of the Kuwait Vision 2035 effectively.

The purpose of this report is to support the State of Kuwait to improve its UNDP Indexes related to the Human Development Index. Fundamentally, this report aims to develop strategies to improve the Human Development Index to support the achievement of the Kuwait National Development Plan. In these ways, it will fundamentally lead to achieving the goals of the Kuwait Vision 2035. And the detailed aims are to interlink HDI indexes to KNDP policies and to investigate the sub-indicators for enhancing Kuwait's Development Indexes by figuring out the effective factors to improve the Indexes in the short period, based on comparing the trends of Gulf Cooperation Council (GCC) Countries' indicators.

## 2. Current status, trends, and challenges

### 1) Human Development Index

Table 1 Comparison of the Human Development Index (HDI) among the Gulf Cooperation Council (GCC) countries

Country	HDI (2019)	World ranking		Life expectancy at birth (2019)	Expected years of schooling <sup>2</sup> (2019)	Mean years of schooling <sup>3</sup> (2019)	GNI per Capita (2019)
		2019	2018				
UAE	0.890	31	30	78.0	14.3	12.1	67,462
Saudi Arabia	0.854	40	40	75.1	16.1	10.2	47,495
Bahrain	0.852	42	41	77.3	16.3	9.5	42,522
Qatar	0.848	45	45	80.2	12.0	9.7	92,418
Oman	0.813	60	56	77.9	14.2	9.7	25,944
Kuwait	0.806	64	62	75.5	14.2	7.3	58,590

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

Kuwait is the last of the HDI ranking among the GCC countries, while its' ranking is 64<sup>th</sup> globally. Kuwait's "life expectancy" and "mean years of schooling" are relatively low comparing with other GCC countries. Especially "mean years of schooling" shows a significant gap (Table 1).

Table 2 HDI growth trends of the GCC countries

Country	HDI							
	1990	2000	2010	2014	2015	2017	2018	2019
UAE	0.723	0.782	0.820	0.847	0.859	0.881	0.889	0.890
Saudi Arabia	0.697	0.743	0.809	0.852	0.859	0.852	0.854	0.854
Bahrain	0.749	0.795	0.800	0.820	0.848	0.854	0.852	0.852
Qatar	0.750	0.816	0.834	0.835	0.839	0.848	0.845	0.848
Oman	-	0.693	0.782	0.802	0.814	0.819	0.813	0.813
Kuwait	0.705	0.781	0.788	0.796	0.801	0.805	0.807	0.806

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

<sup>2</sup> Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child's life.

<sup>3</sup> Average number of years of education received by people ages 25 and older, converted from educational attainment levels using official durations of each level.

The HDI trend changes during the last 30 years in the GCC countries give a meaningful interpretation of the countries' efforts on human development (Table 2; Figures 1 and 2). During the last thirty years, the HDI values of all GCC countries have been improved. The remarkable progress is seen in the United Arab Emirates (UAE) from 0.723 in 1990 to 0.890 in 2019. Also, Bahrain's HDI value was increased from 0.749 to 0.852 (Table 2). Surprisingly, Kuwait's HDI value has not been much enhanced since 2000, after the value was raised during the first ten years (1990-2000) (Figure 2). In comparison, the rest of the countries' values were steadily enhanced in the same period. As a result, the HDI values' gaps are widening between Kuwait and the rest of the nations (Table 2). The change in Kuwait's HDI rank decrease to 5 rungs during the last 30 years (Figure 2).

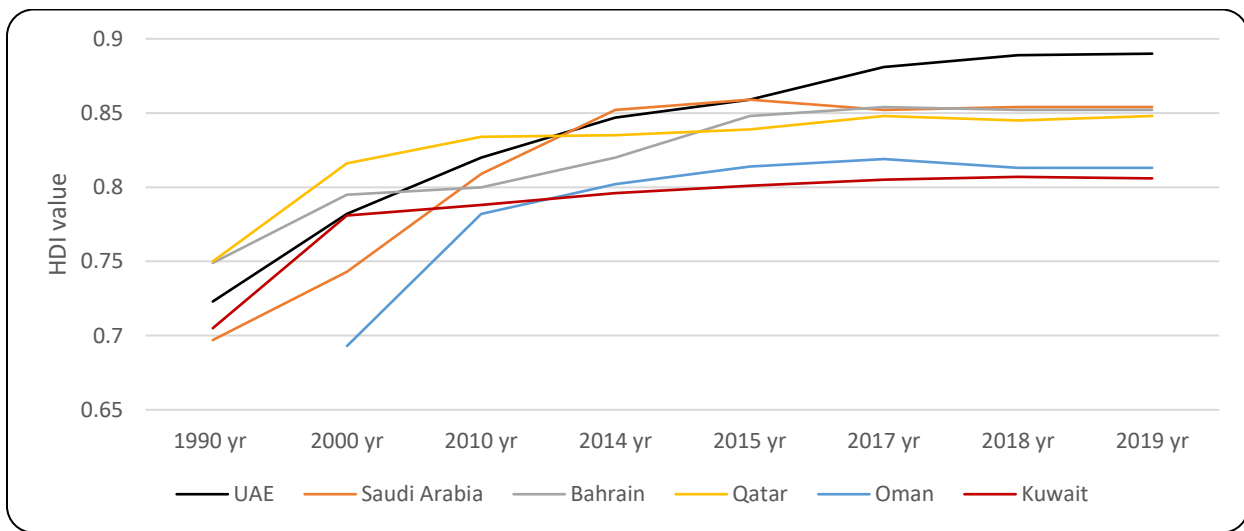


Figure 1 HDI growth trends of the GCC countries

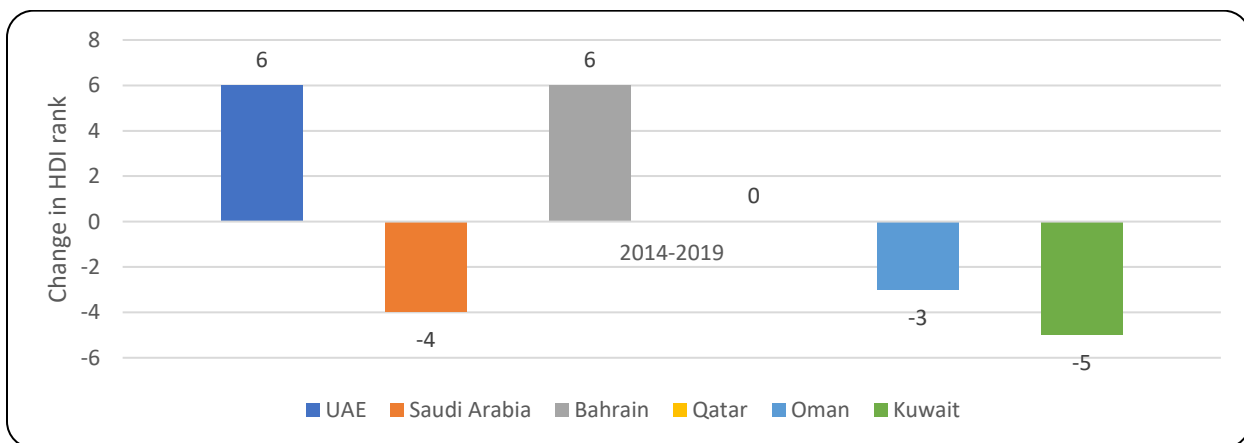


Figure 2 Change in HDI ranks of the GCC countries (2014-2019)

## 2) Inequality-adjusted Human Development Index

Table 3 Inequality-adjusted Human Development Index<sup>1</sup> of the GCC countries

Country	HDI	Life expectancy		Education		Income shares held by richest 1 percent
		Inequality in life expectancy	Inequality-adjusted life expectancy index	Inequality in education	Inequality-adjusted education index	
UAE	0.890	5.2	0.845	18.2	0.656	22.8
Saudi Arabia	0.854	6.4	0.794	18.0	0.647	19.7
Bahrain	0.852	5.5	0.833	22.7	0.594	18.0
Qatar	0.848	5.7	0.874	11.8	0.581	29.0
Oman	0.813	6.7	0.831	11.9	0.633	19.5
Kuwait	0.806	5.9	0.803	22.1	0.497	19.9

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

1. The IHDI value equals the HDI value when there is no inequality across people but falls below the HDI value as inequality rises.

In education sector, “inequality-adjusted education index” in Kuwait is seriously unequal (Table 3). It is not only the lowest within the GCC countries, but also, the value of the index is lower than 5, which is 0.497.

*Challenge 1: There are the factors and reasons to lead to education inequality.*

## 3) Planetary pressure-adjusted HDI

One of the critical factors to reduce the values of HDI is the environmental factor in Kuwait. When the environmental factors are applied, the HDI values are declined hugely in all GCC countries, especially in Kuwait, UAE, and Qatar. In those countries, the “the ranks of planetary pressure-adjusted HDIs decline from HDIs “-87” in UAE, “-84” in Qatar, and “-74” in Kuwait (Table 4). In Kuwait, there are vast emissions of carbon dioxide and material footprint.<sup>4</sup> The amount of material footprint per capita tones is 46.5 in Kuwait, which is much higher than other GCC countries except for UAE.

*Challenge 2: There are urgent needs to take action to reduce the amount of the material footprint.*

<sup>4</sup> “Material footprint” refers to the total amount of raw materials extracted to meet final consumption demands. It is one indication of the pressures placed on the environment to support economic growth and satisfy people's material needs. (UN. SDGs Indicator. <https://unstats.un.org/sdgs/report/2019/goal-12/>)

Table 4 Planetary pressure-adjusted Human Development Index of the GCC countries

Country	Planetary pressure-adjusted HDI				Adjustment factor for planetary pressures (value)	Carbon dioxide emissions per capita (production) (tonnes)	Carbon dioxide emissions (production) index (value)	Material footprint	
	HDI	Value	Difference from HDI value (%)	Difference from HDI rank				per capita (tones)	index (value)
UAE	0.89	0.609	31.6	-87	0.685	21.3	0.694	49.6	0.675
Saudi Arabia	0.854	0.707	17.2	-33	0.827	18.4	0.736	12.4	0.919
Bahrain	0.852	0.691	18.9	-42	0.811	19.8	0.717	14.4	0.906
Qatar	0.848	0.581	31.5	-84	0.685	38	0.456	13.2	0.913
Oman	0.813	0.704	13.4	-15	0.866	13.9	0.801	10.4	0.932
Kuwait	0.806	0.547	32.1	-74	0.678	23.7	0.661	46.5	0.696

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.



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Table 5 Gender development indexes in the GCC countries (2019)

Country	GDI		HDI		Life expectancy at birth		Expected years of schooling		Mean years of schooling		GNI per capita	
	Group <sup>5</sup>	GDI	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Kuwait	1	0.983	0.793	0.807	76.6	74.8	15.2	13.2	8	6.8	31,698	75,840
Qatar	2	1.03	0.866	0.841	82	79.1	14.1	11.3	11.3	9.4	45,338	107,833
Oman	3	0.936	0.768	0.821	80.3	76.1	15	13.7	10.6	9.4	7,959	35,201
UAE	3	0.931	0.842	0.905	79.3	77.3	14.8	14.1	11.7	12.4	28,578	84,723
Bahrain	4	0.922	0.806	0.874	78.4	76.4	16.7	16.1	9.1	9.7	19,059	55,565
Saudi Arabia	5	0.896	0.791	0.883	76.8	73.9	16	16.2	9.8	10.5	16,512	70,181

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

<sup>5</sup> The GDI groups are based on the absolute deviation of GDI from gender parity, 100 (GDI – 1): 2.5 percent or less (Group 1); 2.5–5 percent (Group 2); 5–7.5 percent (Group 3); 7.5–10 percent (Group 4); and more than 10 percent (Group 5).

#### 4) Gender development Index

Superficially Kuwait has very well balanced in the Gender Development Index (GDI) among the GCC countries, positioning in the GDI group 1 (Table 5; Figure 3). But in detail, there are significant gaps between females and males. First, regarding “mean years of schooling,” both sexes’ schooling years are deficient. In addition to the low status, the male’s mean years of schooling are much lower (6.8) than female’s (8.0) (Table 5; Figure 4). As well, the life expectancy at birth of males is much less than females (Figure 5). However, female’s GNI per capita is less than half of male’s (Table 5).

*Challenge 3: There are significant gender gaps, specifically in male’s schooling years, male’s short life expectancy, and female’s low GNI.*

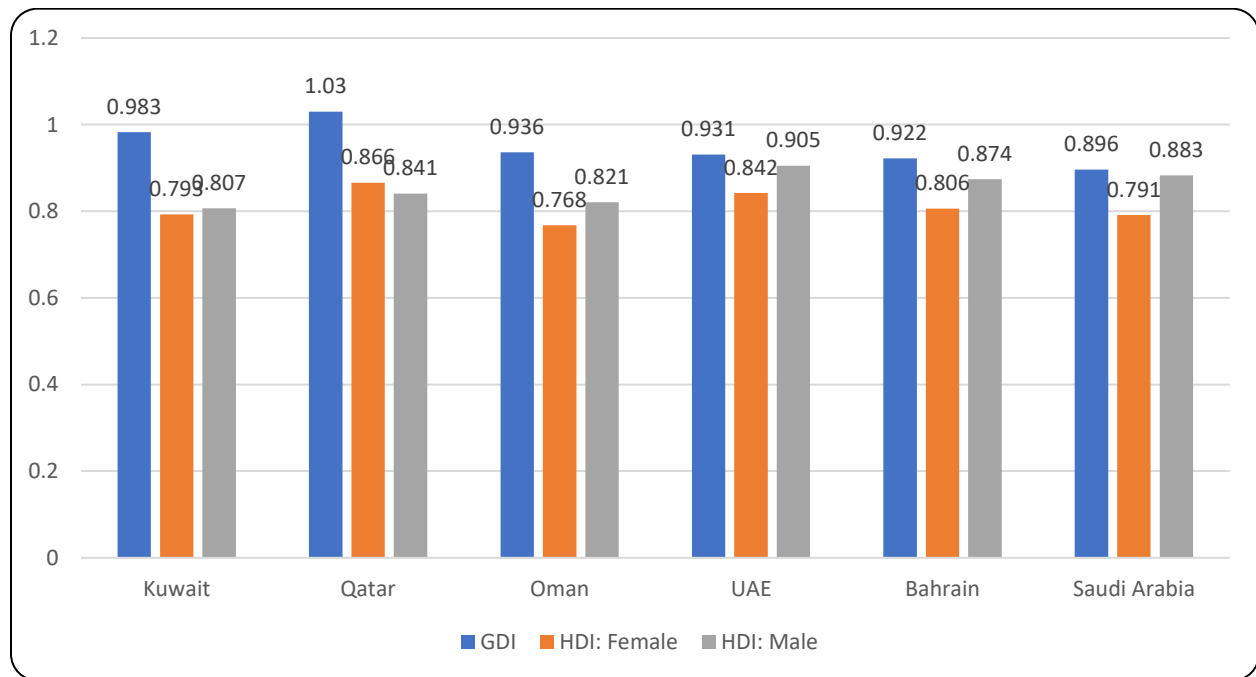
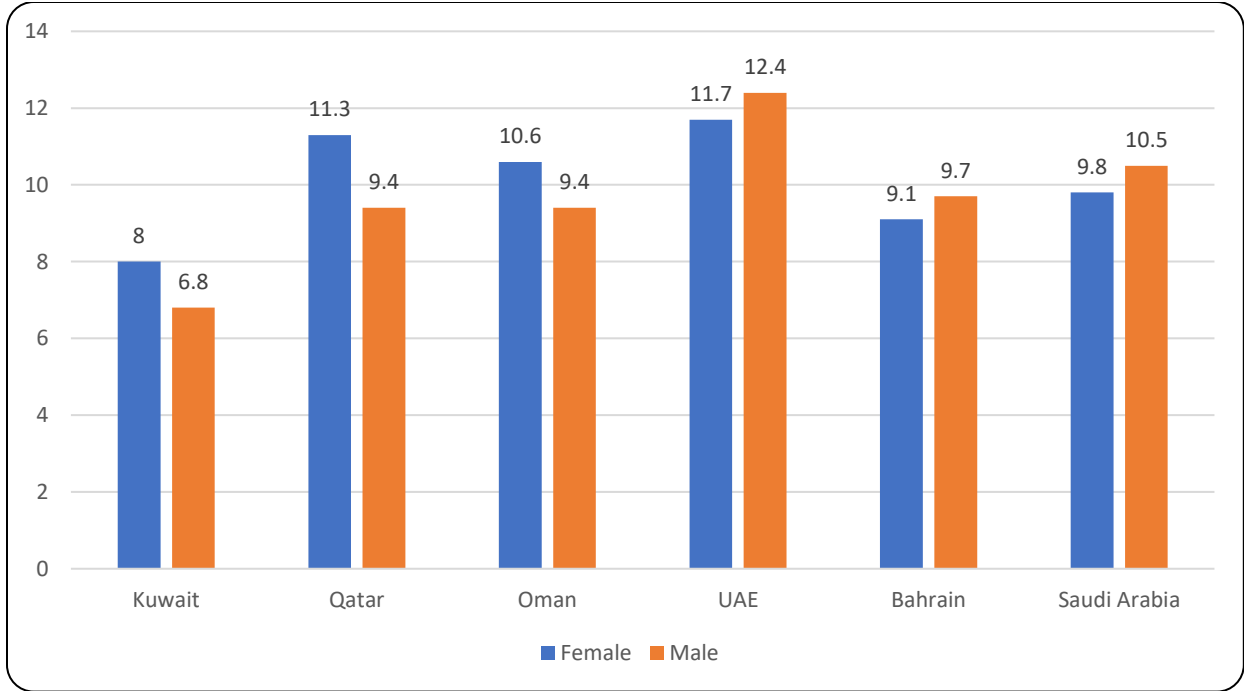
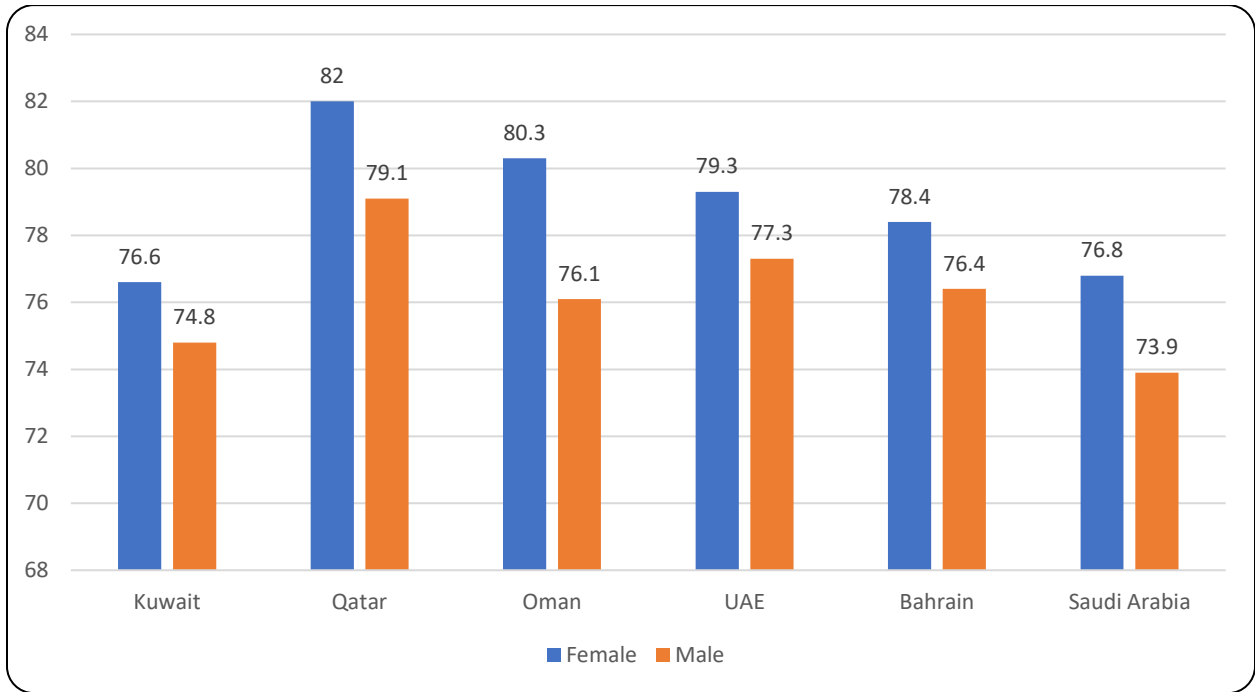


Figure 3 Gender Development Indexes and HDI by gender in the GCC countries



*Figure 4 Mean years of schooling by gender in the GCC countries*



*Figure 5 Life expectancy at birth by gender in the GCC countries*



## 5) Gender Inequality Indexes in the GCC countries

Table 6 Gender Inequality Indexes in the GCC countries

	Gender Inequality Index		Maternal mortality ratio <sup>a</sup>	Adolescent birth rate <sup>b</sup>	Share of seats in parliament <sup>c</sup>	Population with at least some secondary education <sup>d</sup>		Labor force participation rate <sup>e</sup>	
	Value	Rank				Female	Male	Female	Male
	UAE	0.079				18	3	6.5	50.0
Qatar	0.185	43	9	9.9	9.8	76.1	66.2	56.8	94.7
Bahrain	0.212	49	14	13.4	18.8	68.1	74.3	45.0	87.2
Kuwait	0.242	53	12	8.2	4.6	56.6	49.1	49.7	87.5
Saudi Arabia	0.252	56	17	7.3	19.9	64.8	72.4	22.1	78.4
Oman	0.306	68	19	13.1	9.9	73.4	63.7	31.0	89.9

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

a. Deaths per 100,000 live births; b. Births per 1,000 women ages 15-19; c. % held by women; d. % ages 25 and older; e. % ages 15 and older

The rank of the Gender Inequality Index of Kuwait is 53, while UAE is the highest among GCC countries (Table 6). The “share of seats in parliament” is especially 4.6%, which is the lowest among GCC countries. As well, the rate of female participation in the labor market is less than 50% (Table 6). Although females are more likely to attend secondary education than males, the percentage of 56.6 is lowest in the GCC countries. And there is wide space in maternal mortality for lowering it.

*Challenge 4: There are urgent issues to take action for reducing gender inequality, including enhancing maternal health, encouraging attending secondary education (for both genders), providing labor markets for females, and building a system to share seats in parliament.*

## 6) Quality of Human Development

Although the numbers of physician and the hospital beds per 10,000 people are highest in the GCC countries, Kuwait citizens lost their life expectancy significantly, 13.8 years, which is the longest amount in the GCC countries (Table 7). Also, the pupil-teacher ratio in primary schools is outstanding, which is the best among the GCC countries, but the rate of the trained teachers in primary schools is significantly low, 79%, to compare UAE, Saudi Arabia, Bahrain, and Oman. And there are missing data in Table 7 about internet accessibility and Programme for International Student's Assessment (PISA) scores.

*Challenge 5: There are urgent issues to improve the quality of human development, including health promotion for healthy lives, replacing teachers with teachers trained, and adding data available on internet accessibility and PISA scores.*

## 7) Life-Course Gender Gap

Despite the higher secondary education rate than men, women are far behind men in the employment rate in the GCC countries (Table 8). The total unemployment ratio of females in Kuwait is relatively low compared to other GCC countries, but it is still 5.19, which is very high. And employment percentage of the female of Kuwait in agriculture is 24.7, which is the highest in the GCC countries. In conclusion, females' unemployment ratio to males is very high, and many females tend to be employed in agriculture in Kuwait compared to other GCC countries. Female's low employment rates lead to life-course gender gaps from youth age to adult age and older age, resulting in fewer female pension recipients (Table 8).

*Challenge 6: There are high unemployment issues among females from their youth ages throughout their whole life, causing lifetime gender gaps.*

## 8) Women's Empowerment Indexes

Regarding women's empowerment indexes (Table 9), there are many missing data, including "antenatal care coverage," the "percentage of women married by age 18," the "female share of graduates in science, technology, engineering, and mathematics programs at the tertiary level," the "female share of graduates from science, technology, engineering, and mathematics programs in tertiary education," and "female share of employment in senior and middle management." All these missing values are available to access.

*Challenge 7: There are urgent needs to complete women's empowerment index data.*

**Table 7 Quality of human development in the GCC countries**

	Quality of Health			Quality of Education							Quality of Standard Living			
	Lost health expectancy (%)	Physicians (per 10,000 people)	Hospital beds (per 10,000 people)	Pupil-teacher ratio <sup>1</sup> (primary school)	Primary school teachers trained to teach (%)	Primary schools with access to the internet (%)	Secondary schools with access to the internet (%)	Programme for international students' assessment (PISA) score			Vulnerable employment (%)	Rural population with access to electricity (%)	Population using safely managed drinking water services (%)	Population using safely managed sanitation services (%)
								Reading	Mathematics	Science				
UAE	12.9	25.3	14	25	100	100	100	432	435	434	0.9	100		96
Saudi Arabia	13.5	26.1	22	14	100	100	100	399	373	386	3	100		78
Bahrain	13.6	9.3	17	12	100	100	100				1.1	100	99	96
Qatar	13.1	24.9	13	12	49	100	100	407	414	419	0.1	100	96	96
Oman	12.4	20	15	10	100	100	100				2.6	100	90	
Kuwait	13.8	26.5	20	9	79						1.1	100	100	100

1. Pupil per teacher

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

**Table 8 Life-course gender gap in the GCC countries**

Country	Childhood and youth					Adulthood							Older age
	Sex ratio at birth (male to female burths )	Pre-primary (female to male ratio)	Primary (female to male ratio)	Secondary (female to male ratio)	Youth unemployment rate (female to male ratio)	Population with at least some secondary education (female to male ratio)	Total unemployment rate (female to male ratio)	Share of employment in nonagriculture, female (% of total employment in nonagriculture)	Share of seats held by women		Time spent on unpaid domestic chores and care work		Old-age pension recipients (female to male ratio)
									In parliament (%)	In local government (%)	% of 24-hour day	Female to male ratio	
UAE	1.05	0.95	0.98	0.92	2.26	0.94	3.88	17.2	50				
Saudi Arabia	1.03	1.05	1.01	0.94	2.97	0.9	7.67	13.4	19.9	1.1			
Bahrain	1.04	1.03	0.99	1.06	7.81	0.92	19.75	19.8	18.8	13.3			
Qatar	1.05	1.01	1.01		9.77	1.15	11.68	13.8	9.8		8.2	3.7	0.36
Oman	1.05	1.05	1.1	0.92	3.72	1.15	9	12	9.9	3.5	18.9	2.5	
Kuwait	1.05	1.05	1.1	1.06	2.92	1.15	5.19	24.7	4.6				

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

Table 9 Women's empowerment indexes in the GCC countries

Country	Reproductive health and family planning				Child marriage	Socioeconomic empowerment				
	Antenatal care coverage, at least one visit (%)	Proportion of births attended by skilled health personnel (%)	Contraceptive prevalence, any method <sup>1</sup>	Unmet need for family planning	Women married by age 18 <sup>2</sup>	Share of graduates in science, technology, engineering and mathematics programmes at tertiary level, female (%)	Share of graduates from science, technology, engineering and mathematics programmes in tertiary education who are female (%)	Female share of employment in senior and middle management	Women with account at financial institution or with mobile money service provider <sup>3</sup>	Mandatory paid maternity leave (days)
UAE		99.9				22.2	41.5	15.8	76.4	45
Saudi Arabia		99.4	24.6			14.7	36.8		58.2	70
Bahrain		99.9				10.5	41.2		75.4	60
Qatar	90.8	100	37.5	12.4	4	15.9	47.6		61.6	50
Oman	98.6	98.6	29.7	17.8	4	41	55.7		63.5	50
Kuwait		99.9							73.5	70

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

1. % of married or in-union women of reproductive age, 15-49 years
2. % of girls 20-24 who are married or in union
3. % of female population ages 15 and older

## 9) Environmental Sustainability Indexes

Table 10 shows the Red List Index (RLI) values of the GCC countries, which are progressive (Table 10). However, there are several measures to enhance the index for Kuwait, including “expanding forest area,” “reducing household and ambient pollution,” and “reducing domestic material consumption.” And there are missing values available to add, such as “freshwater withdrawals,” “nitrogen and phosphorus amount of consumption as fertilizer nutrient.”

*Challenge 8: There are issues on lack of forest, a considerable amount of domestic material consumption, and household and ambient population.*

## 10) Socioeconomic Sustainability Indexes

There is a limit to ensure economic sustainability with low research and development (R&D) expenditure. Kuwait shows the lowest level of R&D expenditure among GCC countries (Table 11). And dependency ratio of old age is higher than other GCC countries. As well, there is missing data available to add, including "percentage of the skilled labor force" and the "ratio of education and health expenditure to military expenditure."

*Challenge 9: There are issues on low research and development expenditures.*

*Challenge 10: There is a growing burden for the aging population.*

Table 10 Environmental sustainability indexes in the GCC countries

Country	Carbon dioxide emission			Forest area		Fresh water withdrawals <sup>3</sup>	Use of fertilizer nutrient per area of cropland		Domestic material consumption per capita (tones)	Environmental threats				
	Fossil fuel energy consumption <sup>1</sup>	Production emissions per capita (tonnes)	Per unit of GDP <sup>2</sup>	% of total land area	Change (%)		Nitrogen <sup>4</sup>	Phosphorus (expressed as P <sub>2</sub> O <sub>5</sub> ) <sup>4</sup>		Mortality rate attribute to		Number of deaths and missing persons attributed to disasters <sup>6</sup>	Degraded land <sup>7</sup>	Red List Index (Value)
										Household and ambient air pollution <sup>5</sup>	Unsafe water, sanitation and hygiene services <sup>6</sup>			
UAE	86.1	21.3	0.32	4.6	32.1	1,708.0	185.3	50.8	22.5	55	0.1		1	0.857
Saudi Arabia	99.1	18.4	0.34	0.5	0.0	883.3	47.8	26.3	25.0	84	0.1		4	0.907
Bahrain	99.4	19.8	0.47	0.8	145.9	132.2			28.6	40	0.2			0.751
Qatar	100.0	38.0	0.26	0.0	0.0	432.4	82.4	29.4	52.5	47	0.1		6	0.821
Oman	100.0	13.9	0.38	0.0	0.0	116.7	93.9	28.3	31.7	54	0.1		7	0.891
Kuwait	93.7	23.7	0.34	0.4	81.2				29.6	104	0.1	0.0	64	0.838

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

1. % of total energy consumption
2. kg per 2010 US\$ of GDP
3. % of total renewable water resources
4. kg per hectare
5. per 100,000 population, age-standardized
6. per 100,000 population
7. % of total land area

Table 11 Socioeconomic sustainability indexes in the GCC countries

Country	Economic sustainability						Social sustainability					
	Adjusted net saving (% of GNI)	Total debt service <sup>1</sup>	Gross capital formation (% of GDP)	Skilled labour force <sup>2</sup>	Concentration index (exports)	Research and development expenditure (% of GDP)	Dependency ratio	Education and health expenditure versus military expenditure		Overall loss in HDI value due to inequality <sup>4</sup>	Gender Inequality Index <sup>4</sup>	Income share of the poorest 40 % <sup>4</sup>
							Old age (65 and older) <sup>3</sup>	Military expenditure (% of GDP)	Ratio of education and health expenditure to military expenditure			
UAE			23.8	52.4	0.231	1.3	6.4	5.6			-13.4	
Saudi Arabia	17.2		27.3	58.7	0.557	0.8	8.3	8.8	1.1		-6.8	
Bahrain	19.9		36.4	19.3	0.386	0.1	7.1	3.6	1.6		-2.9	
Qatar	29.3		44.4	43.9	0.463	0.5	5.7	1.5	4.2			
Oman	-17.5		23.3		0.447	0.2	6.0	8.2	0.7		-1.7	
Kuwait	18.9		25.2		0.486	0.1	10.0	5.1			-3.2	

Source: UNDP. (2020) The next frontier: Human development and the Anthropocene (Human development report 2020). United Nations Development Programmes.

1. % of exports of goods, services, and primary income
2. % of labour force
3. per 100 people ages 15-64
4. Average annual change (%)



### 3. Relation with HDIs and KNDP 2020-2025

#### 1) Characteristics of KNDP 2020-2025

Three hundred forty-two policies across the seven pillars and 105 international indicators were involved in KNDP 2020-2025. The KNDP 2020-2025 is characterized in:

- Alignment across all government entities and stakeholders by building the KNDP around relevant themes, and adopting a whole-of-government, coordinated approach
- Connection with a global agenda and promotion of a sustainable society by aligning the KNDP to global KPIs such as SDGs
- Focus on eight concise programs that highlight the need to boost the regulatory role of the government and involve the private sector throughout all sectors to improve the effectiveness

Another character is that the seven pillars' actions were integrated into eight multi-programs in the KNDP 2020-2025 like below.

- Unlock the northern hub potential
- Foster a dynamic private sector
- Equip the people with the skills and incentives for future growth
- Develop a transparent and synergistic government
- Build a connected and integrated infrastructure
- Build a livable and harmonious environment
- Improve our health and wellbeing
- Contribute to the global community

It also targeted to cross-link with global goals, sustainable development goals tightly. To help ensure Kuwait's alignment with the broader global development agenda, numerous meetings and reviews have taken place with representatives from the UN. Based on the discussions and feedback from the UN representative office in Kuwait, the policies included in the plan address all 17 Sustainable Development Goals (SDGs).

#### 2) HDI indicators

##### Human Development Index (HDI)

- Life expectancy at birth

- Expected years of schooling
- Mean years of schooling
- GNI per Capita

### *Inequality-adjusted Human Development Index*

- Inequality in life expectancy
- Inequality-adjusted life expectancy index
- Inequality in education
- Inequality-adjusted education index
- Income shares held by the richest 1 percent

### *Planetary pressure-adjusted Human Development Index*

- Carbon dioxide emissions
- Material footprint

### *Gender development indexes*

- Life expectancy at birth
- Expected years of schooling
- Mean years of schooling
- GNI per Capita

### *Gender Inequality Indexes*

- Maternal mortality ratio
- Adolescent birth rate
- Share of seats in parliament
- Population with at least some secondary education
- Labor force participation rate

### *Quality of Human Development*

- Lost health expectancy
- Physicians (per 10,000 people)
- Hospital beds (per 10,000 people)
- Pupil-teacher ratio (primary school)
- Primary school teachers trained to teach (%)
- Primary schools with access to the internet (%)

- Secondary schools with access to the internet (%)
- Programme for International Students' Assessment (PISA) score
- Vulnerable employment (%)
- Rural population with access to electricity (%)
- Population using safely managed drinking water services (%)    Population using safely managed sanitation services (%)

### Life-course gender gap

- Sex ratio at birth (male to female births)
- Pre-primary (female to male ratio)
- Primary (female to male ratio)
- Secondary (female to male ratio)
- Youth unemployment rate (female to male ratio)
- Population with at least some secondary education (female to male ratio)
- Total unemployment rate (female to male ratio)
- Share of employment in nonagriculture, female (% of total employment in nonagriculture)
- Share of seats held by women
- Time spent on unpaid domestic chores and care work
- Old-age pension recipients (female to male ratio)

### Women's empowerment indexes

- Antenatal care coverage, at least one visit (%)
- Proportion of births attended by skilled health personnel (%)
- Contraceptive prevalence, any method
- Unmet need for family planning
- Women married by age 18
- Share of graduates in science, technology, engineering and mathematics programmes at tertiary level, female (%)
- Share of graduates from science, technology, engineering and mathematics programmes in tertiary education who are female (%)
- Female share of employment in senior and middle management
- Women with account at financial institution or with mobile money service provider
- Mandatory paid maternity leave (days)

### Environmental sustainability indexes

- Carbon dioxide emission

- Forest area
- Use of fertilizer nutrient per area of cropland
- Domestic material consumption per capita
- Mortality rate attribute to household and ambient air pollution
- Mortality rate attribute to unsafe water, sanitation and hygiene services
- Number of deaths and missing persons attributed to disasters
- Degraded land
- Red List Index (Value)

### Socioeconomic sustainability indexes

- **Economic sustainability**
  - Adjusted net saving (% of GNI)
  - Total debt service
  - Gross capital formation (% of GDP)
  - Skilled labour force
  - Concentration index (exports)
  - Research and development expenditure (% of GDP)
- **Social sustainability**
  - Dependency ratio
  - Education and health expenditure versus military expenditure
  - Overall loss in HDI value due to inequality
  - Gender Inequality Index
  - Income share of the poorest 40 %

## 3) Target level

### KNDP

Kuwait National Development Plan (KNDP) 2020-2025 was approved by parliament in June 2021. Its' main target is to reach the 35<sup>th</sup> of the Global Competitiveness Index (GCI, World Economic Forum) by 2035 (in 2019, 46<sup>th</sup> among 141 countries).

### HDI

Applying to the Human Development Index (HDI, United National Development Programme), the target, 35<sup>th</sup> of GCI is equivalent to 47<sup>th</sup> in HDI (in 2019, 64<sup>th</sup> among 189 countries).

#### **4) Program 1: Unlock the northern hub potential**

This program, manifested through a special economic zone, catapult the economy of Kuwait to the next level. And it aims through the creation of a semi-autonomous economic region in the north to reduce Kuwait's reliance on oil and lead to a more sustainable economy.

##### **Main targets**

- NEZ law and executive by laws implemented
- Investment and development corporation, regulatory authority and development companies established
- Master plan completed; and Port Mubarak activated

##### **Policies**

- Define a framework for an international business ecosystem and align with international partners
- Ensure independent governance and regulation to administer the territory
- Ensure that projects follow a holistic master plan to maximize the impact of the development of the territory
- Prioritize critical initiatives to expedite investment and development

##### **Impacts on SDGs**

By setting up a business-friendly regulatory environment, fostering a human-centric environment and setting up anchor infrastructure projects, this programme will attract FDI and facilitate the growth of innovative industries. This way, Kuwait will be able to decrease its heavy reliance on oil and foster a more sustainable economy. The development of the Northern Economic Zone will be beneficial for the country as a whole and will contribute to achieving all SDGs.

##### **Linkages with HDIs**

- Human Development Index (HDI)
- Planetary pressure-adjusted Human Development Index
- Gender development indexes
- Quality of Human Development
- Women's empowerment indexes
- Environmental sustainability indexes

- Socioeconomic sustainability indexes
  - Economic sustainability
  - Social sustainability

## 5) Program 2: Foster a dynamic private sector

This program boosts private sector growth by improving the business environment, and by enhancing innovation capability and international competitiveness.

### Main targets

- Product market indicator (GCI, World Economic Forum, 2019): 51<sup>st</sup> in 2019 --> 49<sup>th</sup> by 2035
- Ease of doing business index (World Bank, 2019): 83<sup>rd</sup> in 2019--> 67<sup>th</sup> by 2035
- Innovation capability indicator (GCI, World Economic Forum, 2019): 108<sup>th</sup> --> 49<sup>th</sup> by 2035

### Policies

- Shift activities from the public to private sector by accelerating the privatization of government operating entities
- Increase private sector participation by growing the share of projects financed through public-private partnerships (PPP)
- Develop economies of scale by aligning and incentivizing the priority sectors for the economy
- Enable a level playing field for all companies by strengthening the competition framework
- Make it easier to start, operate and expand businesses
- Grow foreign direct investment (FDI) by facilitating entry into the national economy
- Accelerate the development of innovative products and services by creating an integrated ecosystem for technology, innovation, and knowledge
- Enable entrepreneurs and small and medium enterprises (SMEs) by expanding the private sector's role in SME incubation, funding and upscaling

### Impacts on SDGs

Goal 4: By promoting innovation, research and knowledge, this program encourages youth to acquire relevant skills for employment and for entrepreneurship

Goal 5: By ensuring the end of all forms of discrimination to women, full and effective participation and equal opportunities at all levels of decision-making, the government aims to strengthen women's capabilities and enhance their economic and political participation

Goal 7: By promoting R&D for greener technologies, the government aims to induce investment into projects

Goal 8: By making it easier to do business, the government aims to support productive activities, decent job creation, entrepreneurship, creativity and innovation, resulting in economic growth and diversification

Goal 9: By encouraging the development of knowledge-based clusters, the government aims to enhance scientific research, upgrade technological capabilities to support inclusive industrialization, and lay the foundation for a national knowledge economy

Goal 10: By ensuring a level playing field for all companies and removing barriers to business, the program aims to grow the number of people participating in the economy

Goal 12: By promoting best practices of the circular economy, the program aims to ensure sustainable and efficient use of natural resources

Goal 17: By increasing the private sector's involvement in the economy, the program aims to promote effective public, public-private, and civil society partnerships, resulting in improved effectiveness and additional FDI

### **Linkages with HDIs**

- Human Development Index (HDI)
- Inequality-adjusted Human Development Index
- Gender development indexes
- Gender Inequality Indexes
- Quality of Human Development
- Women's empowerment indexes
- Environmental sustainability indexes
- Socioeconomic sustainability indexes
  - [Economic sustainability](#)
  - [Social sustainability](#)

## **6) Program 3: Equip the people with the skills and incentives for future growth**

This program enhances the skills and employability of the workforce for future economic growth and will improve the quality of education. It also advocates for the social, economic, and political inclusion of disadvantaged groups, including women, youth, persons with disability, and the elderly.

### **Main targets**

- Human capital index (World Bank, 2018): 77<sup>th</sup> in 2018 --> 55<sup>th</sup> by 2035
- Kuwaitis in the private sector (Central Statistics Bureau, 2019) 19% in 2019 --> 69% by 2035
- Gender gap index (World Economic Forum, 2018): 126<sup>th</sup> in --> 52<sup>nd</sup> by 2035

### **Policies**

- Improve attractiveness of private sector employment by rebalancing compensation and working conditions across the private and public sectors
- Create a smart foreign labor admission system that attracts highly skilled workers
- Align education outcomes to labor market needs to equip students with relevant skillset
- Develop a national skills formation system and revamp workforce development to support the transition into a knowledge economy
- Improve general education, including curriculum, teacher skillset, and methods
- Develop high-quality early childhood education (ECE) to improve school readiness among children
- Promote STEM learning towards a knowledge economy and foster the internationalization of higher education
- Encourage the social, economic, and political inclusion of youth, women, persons with disabilities, and the elderly
- Rebalance the social protection system and transition to an integrated social safety net

### **Impacts on SDGs**

Goal 4: By advocating policies aimed at standardizing and mandating early childhood education, this program aims to improve learning outcomes, and to expand the supply of qualified teachers, and promote inclusive and accessible learning



Goal 5: By encouraging access for women to employment, education, and leadership positions in the public and private sectors, the program aims to empower women and ensure effective participation and equality for leadership

Goal 8: By promoting full and productive employment for everyone, including people with disabilities, the program targets reducing youth unemployment, eradicating forced labor, and promoting a safe working environment for migrant workers, especially women

Goal 10: By focusing on social, economic, and political inclusion of all members of society, by encouraging the elimination of discriminatory laws and practices, and by adopting efficient social protection policies, the program will ensure equal opportunity for all

Goal 16: By encouraging the inclusion of all members of society, this program aims to ensure responsive, inclusive, participatory and representative decision-making

### Linkages with HDIs

- Human Development Index (HDI)
- Inequality-adjusted Human Development Index
- Gender development indexes
- Gender Inequality Indexes
- Quality of Human Development
- Life-course gender gap
- Women's empowerment indexes
- Socioeconomic sustainability indexes
  - Economic sustainability
  - Social sustainability

## 7) Program 4: Develop a transparent and synergistic government

This program improves the effectiveness and transparency of the government both in terms of how it functions internally, and in terms of how it serves citizens, residents, and businesses.

### Main target

- Government effectiveness index (World Bank, 2019): 106<sup>th</sup> in 2019 --> 74<sup>th</sup> by 2035
- E-Participation index (UN, 2019): 72<sup>nd</sup> in 2018 --> 68<sup>th</sup> by 2035

- Corruption perception index (Transparency International, 2018): 78<sup>th</sup> 2018 --> 63<sup>rd</sup> in 2035

## **Policies**

- Streamline structures, mandates, and governance in accordance with government restructuring recommendations
- Strengthen performance management and reform civil service across the public administration
- Transform government operations to digital government
- Expand the role of the private sector in public service delivery
- Boost national integrity and anti-corruption in government entities
- Introduce performance-based budgeting with a medium-term planning horizon
- Diversify fiscal tax base to reduce dependency on oil

## **Impacts on SDGs**

Goal 8: By focusing on efficiency and digitization, the program will achieve higher levels of economic productivity in the public sector

Goal 9: By promoting the diversification of the economy, this program encourages growing the manufacturing sector and research and development (R&D)

Goal 12: By reducing the reliance of the economy on oil, the program will simultaneously reduce inefficient fossil-fuel subsidies thereby decreasing national expenditure on fossil fuels

Goal 16: By improving governance, and by increasing transparency and customer focus, the program aims to reduce corruption and bribery, and enhance institutional effectiveness

Goal 17: By expanding the fiscal revenue base beyond oil, Kuwait's economic stability will be enhanced. Close cooperation between the private sector, government, and civil society is key to improved service deliver

## **Linkages with HDIs**

- Human Development Index (HDI)
- Inequality-adjusted Human Development Index
- Gender development indexes
- Gender Inequality Indexes
- Quality of Human Development
- Women's empowerment indexes
- Socioeconomic sustainability indexes

- Economic sustainability
- Social sustainability

## 8) Program 5: Build a connected and integrated infrastructure

This program will create integrated and connected infrastructure between people, workspaces, and places for leisure and socializing and will improve Kuwait's connectivity with the world

### Main target

- Fixed broadband subscriptions indicator ((GCI, World Economic Forum, 2019): 90<sup>th</sup> in 2019 --> 49<sup>th</sup> by 2035
- Unmet demand for housing (Public Authority for Housing Welfare, 2019): 94,000 in 2019 --> 40,000 by 2035
- Transport infrastructure indicator (GCI, World Economic Forum, 2019): 79<sup>th</sup> in 2019 --> 49<sup>th</sup> by 2035

### Policies

- Improve the management of land and facilities, by facilitating the implementation of the 4th Kuwait Master Plan (4KMP)
- Create sustainable alternatives to the existing housing system
- Optimize land mobility by developing smart transport processes and new modes of public transport
- Improve airport infrastructure and operations for a better air travel experience
- Improve existing port infrastructure and operations to facilitate international trade
- Ensure competitive access to ICT infrastructure and services for the digital and knowledge economy

### Impacts on SDGs

Goal 4: By improving access to high-speed broadband, this program will ensure education facilities are upgraded with new technology such as computers for teaching purposes

Goal 9: By improving infrastructure quality and connectivity, this program seeks to expand national coverage of fiber networks to expand access to ICT. Additionally, it

aims to increase the volume of passenger and freight infrastructure to support economic development through upgrades to air, sea, and land ports

Goal 11: By improving land planning and management, advancing alternatives to the social housing system will enhance inclusive and sustainable urbanization, access to public spaces, and affordable housing for all. Additionally, by improving traffic management and expanding public transport modes, this program advocates access to safe, affordable, accessible, and sustainable transport systems for all

Goal 12: By improving the management of land and facilities, and by expanding modes of public transport, this program aims to enhance inclusive and sustainable urbanization and capacity for participatory, integrated, and sustainable human settlement planning and management in Kuwait

### Linkages with HDIs

- Human Development Index (HDI)
- Planetary pressure-adjusted Human Development Index
- Quality of Human Development
- Environmental sustainability indexes
- Socioeconomic sustainability indexes
  - [Economic sustainability](#)
  - [Social sustainability](#)

## 9) Program 6: Build a livable and harmonious environment

This program improves the livability of the Kuwait metropolitan area by upgrading water, energy, and waste systems. And eco-cities featuring green infrastructure and smart technologies be built, with the objective of improving the livability of Kuwaiti cities.

### Main targets

- Rate of sewage water treatment (Central Statistics Bureau, 2018): 70% in 2019 -> 90% by 2035
- Climate and energy indicator (Yale University, Columbia University, World Economic Forum, 2018): 161<sup>st</sup> in 2018 --> 63<sup>rd</sup> by 2035
- Rate of diversion from landfill (SUSTAINABLE WASTE UTILITIES) (World Bank, 2018): 0% in 2018 --> 80% by 2035

By 2030, Kuwait will supply 15% of its domestic electricity from renewable energy sources (Kuwait Institute for Scientific Research, 2019)

## **Policies**

- Improve water resource management, including wastewater treatment and reclamation, water use efficiency, and desalination
- Build eco-cities using green building and green infrastructure principles, and smart technology
- Advance innovation in low emission technology and promote fuel efficiency standards
- Boost the role of renewables in the utilities sector
- Integrate solid waste management, with a focus on improving waste disposal and resource recovery

## **Impacts on SDGs**

Goal 6: By better monitoring wastewater treatment, this program will prevent water pollution, and by implementing water reclamation standards, this program will achieve better fresh water-use efficiency

Goal 7: By improving energy efficiency and mobilizing clean energy research, this program will boost Kuwait's renewables sector

Goal 9: By boosting the role of renewables and promoting fuel efficiency standards, this program will contribute to the development of quality, reliable and sustainable infrastructure

Goal 11: By promoting improved ambient air quality in cities and reducing the impact of solid waste, this program helps makes cities more sustainable

Goal 12: By reducing waste, expanding recycling and promoting sustainability education, Kuwait will encourage responsible consumption

Goal 13: By advancing technology in renewable energy and striving to meet the national target for renewable power, this program will mitigate greenhouse gas emissions thereby lessening Kuwait's contribution to global climate change

Goal 14: By taking steps to improve the quality of water effluent, the program will help protect life below water

Goal 15: By improving solid waste management practices, replacing open waste dumps with sanitary landfills and rehabilitating existing waste infrastructure, the program will limit soil contamination and degradation and contribute to safeguarding terrestrial life

## Linkages with HDIs

- Human Development Index (HDI)
- Inequality-adjusted Human Development Index
- Planetary pressure-adjusted Human Development Index
- Gender development indexes
- Gender Inequality Indexes
- Quality of Human Development
- Life-course gender gap
- Women's empowerment indexes
- Environmental sustainability indexes
- Socioeconomic sustainability indexes
  - [Economic sustainability](#)
  - [Social sustainability](#)

## 10) Program 7: Improve our health and wellbeing

This program improves the health and wellbeing of Kuwaitis by combating noncommunicable diseases, promoting public health, especially for children, youth and women, and improving the quality of healthcare service delivery.

### Main targets

- Life expectancy at birth indicator (World Bank, 2017) 83<sup>rd</sup> in 2017 --> 65<sup>th</sup> by 2035
- Youth overweight rate (World Health Organization, 2016): 181<sup>st</sup> in 2016 --> 67<sup>th</sup> by 2035
- Non-communicable disease mortality 2016 (World Health Organization, 2016) 75 in 2016 --> 64 by 2035

### POLICIES

- Improve youth wellbeing by combating substance use and road injury, and promoting sports
- Scale up the healthy cities initiative and promote community development, and individual health and wellbeing at the local level
- Enhance health information technology systems and launch a national health and nutrition survey
- Optimize health workforce capacity and capabilities
- Revamp the healthcare service delivery system and adopt new health technology and treatments

- Upgrade national health insurance framework, health costing and financing
- Promote health literacy and improve people’s ability to make appropriate health decisions

### **Impacts on SDGs**

Goal 2: By promoting better nutrition, this program will help end all forms of malnutrition and decrease the rate of obesity

Goal 3: By encouraging public health, preventative care, and healthy lifestyles, the program aims to reduce the mortality rate from non-communicable diseases. It also aims to control road accident injuries and substance abuse through a series of nudge interventions

Goal 5: By ending all forms of discrimination against women, the program will support equality in sports. Additionally, by improving overall healthcare service delivery for all, this program will raise the quality of women health

Goal 11: By increasing awareness on road safety, this programs aims to improve roads and safe access to transport for all

### **Linkages with HDIs**

- Human Development Index (HDI)
- Inequality-adjusted Human Development Index
- Gender development indexes
- Gender Inequality Indexes
- Quality of Human Development
- Life-course gender gap
- Women’s empowerment indexes
- Socioeconomic sustainability indexes
  - [Social sustainability](#)

## **11) Program 8: Contribute to the global community**

This program celebrates the wealth of Kuwait’s culture and its unique history as an international trading nation, and establish the country as a regional and global meeting point for the promotion of peace and the exchange of ideas.

## **Main targets**

- Nation brand index (Brand Finance, 2019): 51<sup>st</sup> in 2019 --> 35<sup>th</sup> by 2035
- Total humanitarian aid flows (UNOCHA, 2018): 9<sup>th</sup> in 2019 --> 9<sup>th</sup> by 2035
- Intangible cultural heritage indicator (World Economic Forum, 2019): 105<sup>th</sup> in 2019 --> 49<sup>th</sup> by 2035

## **Policies**

- Boost economic diplomacy and international development
- Revitalize cultural and historic sites by improving access to them and implementing sustainable management
- Expand the creative economy by promoting national arts, culture and media production
- Host and participate more in international events and conferences
- Promote Kuwait's achievements and contributions by defining the country's brand

## **Impacts on SDGs**

Goal 2: By increasing international cooperation agricultural research and technology, this program will contribute to zero global hunger

Goal 3: By increasing assistance to medical research and health sector, this program aims to improve health and well-being worldwide

Goal 4: By offering development assistance flows for scholarships and trainings, this program will raise the quality of education globally

Goal 6: By investing in water and sanitation technologies, activities and programs globally, this program will support more people internationally in having access to these services

Goal 8: By improving the arts, media and tourism industries, this program will boost Kuwait's creative economy and tertiary sector

Goal 9: By providing strategic development grants and loans towards innovation and infrastructure, this program will support economic growth in developing countries

Goal 10: By strategically investing and offering FDI to countries with the greatest needs, this program aims to reduce inequalities globally

Goal 11: By strengthening the sustainable management of Kuwait's historic sites, this program aims to protect world heritage



Goal 12: By establishing sustainable tourism strategies, this program aims to create jobs in the sector and promote local cultures

Goal 13: By mobilizing funds towards air pollution and climate-related technologies and capacity building, this program supports global climate action

Goal 15: By offering development assistance on conservation and biodiversity, this program improves life on land internationally

Goal 16: By increasing targeted developmental aid and grants, this program advocates safeguarding peace and stability worldwide

Goal 17: By continuing to provide developmental assistance, Kuwait aims to advance the global agenda and contribute to the SDGs

### **Linkages with HDIs**

- Human Development Index (HDI)
- Inequality-adjusted Human Development Index
- Gender development indexes
- Gender Inequality Indexes
- Quality of Human Development
- Women's empowerment indexes
- Socioeconomic sustainability indexes
  - [Economic sustainability](#)
  - [Social sustainability](#)

## 4. Recommendations for HDI improvement

### 1) Labor

Women's labor force participation rates are low in all GCC countries; furthermore, less than 50% of Kuwait's women participate in the labor market (Table 6). Thus, females' unemployment rate is more than 5 times higher than males' in Kuwait (Table 8). These imbalances of labor force participation through the life-course from youth unemployment to older age (pension recipients) between men and women leads to lifetime gender GNI gaps (\$31,698 vs. \$75,840; Table 5).

*Recommendation 1: Conduct research and survey to determine the reasons or barriers that discourage women's labor force participation and develop strategies for women's contributions to labor markets.*

### 2) Education

Kuwait people's mean years of schooling is 7.3 years which is significantly short (Table 1). The reasons that the inequality-adjusted education index is less than 0.5, which is the worst in GCC countries (Table 3), are the 1.2 years gap between males and females (Figure 4) and males' low attendance at secondary education (Table 6). Ironically, nevertheless, of higher completion of females' secondary education, females tend to be less likely to participate in the labor market (Table 6). This means it is expected there is miss-matching in job markets. Regarding education quality, the trained teacher's rate for primary schools is 79%, relatively low than other GCC countries (Table 7).

*Recommendation 2: Develop education strategies interlinked to labor markets, including diversification of the secondary education programs to match job markets for encouraging people to attend secondary education.*

*Recommendation 3: Implement strategies to replace untrained teachers in primary education with trained teachers.*

### 3) Health

Kuwait's life expectancy at birth is relatively short compared with other GCC countries (Table 1). Still, the males' life expectancy is much shorter than females' (Figure 5). Ironically, the numbers of physicians and hospital beds per 10,000 people are top-level among the GCC countries but lost health expectancy (%) is the biggest (Table 7). Kuwait's maternal mortality ratio is the highest among the GCC countries (Table 6). As well, the mortality rate attributed to household and ambient air pollution is double that of other GCC countries (Table 10).

*Recommendation 4: Shift paradigm in health strategy from treatment to a health promotion orientation.*

*Recommendation 5: Develop strategies to enhance maternal health, including maternal-child care management, family planning, and health education and promotion programs.*

*Recommendation 6: Formulate strategies to improve household and building's air quality, and reduce air pollution, including healthy designing of house and building and controlling the air pollution sources such as cars and factories and other chimneys.*

### 4) Women

Although the Gender Development Index is the best in the GCC countries, the Human Development Indexes of both males and females are at the lowest level in the region (Figure 3). For men, there are challenges lowering the HDI in the low attendance to secondary education (Table 6) and short life expectancy (Table 5). For women, women's empowering challenges are the factors to reduce the females' HDI, including high unemployment of women (Table 6) and low share of seats in parliament and local government (Table 8). Although Kuwait's adolescent birth rate is not at the highest level in the GCC countries, it is still high that necessary efforts are needed (Table 6).

*Recommendation 7: Develop strategies to raise the proportion of the seats in the parliament and local governments.*

*Recommendation 8: Start healthy marriage education programs from an early age.*

## 5) Social, economic, and physical environment

When the planetary pressure indexes are applied to measure the Human Development Index, the HDI's rank goes nearly 74 rungs backside to the rank of 138 in the World (Table 4). And the levels of carbon dioxide emission and material footprint are significantly high than other GCC countries. And the mortality from ambient air pollution is much higher than in other countries, and domestic material consumption level is high (Table 10). Kuwait shows the lowest R&D expenditure and highest old-age dependency ratio among the region (Table 11).

*Recommendation 9: Develop strategies to expand the forest through the related projects such as green city projects, healthy city initiatives, and smart city projects.*

*Recommendation 10: Develop strategies for active aging programs linked with the National Transfer Account, labor markets, and education systems.*

*Recommendation 11: Develop steps to reduce the amount of carbon dioxide emission and material footprint linked with source control systems and labor markets.*

*Recommendation 12: Develop strategic steps and frameworks to increase research and development investment linked with public-private partnerships.*

## 6) Further studies

Many indicators are complemented if the missing data is available to include. Indeed, there are many data available to add now in Kuwait, such as in “women's empowerment index,” “quality of human development,” “life-course gender gap,” “environmental sustainability indexes,” and “socioeconomic sustainability indexes.”

*Most of all, the study to interlink all indicators to predict the primary index, the Human Development Index, is urgently needed. It needs to include particular experts in environment, socio-economy, education, gender, health, and labor. Through the study, it would be possible to formulate a strategic action plan to enhance the Human development indexes efficiently in a short period.*

*Recommendation 13: Formulate a strategic action plan to enhance the Human Development Indexes.*

## 5. Scenarios and Conclusion

### 1) Scenarios

In this report, the Scenario was divided into four stages (Table 12). The first stage scenario is a scenario that can be reached by 2025, and the second stage scenario is a scenario for achieving the goal set at the level set in The Kuwait Vision 2035.<sup>6</sup> Scenario 2's target year of achievement is set to 2028 because it is a sufficiently achievable target if a strategic plan for HDI improvement is formulated correctly. Scenarios 3 and 4 are the most achievable scenarios by 2035.

The 13 recommendations in the previous chapter are the activities for the indicators that UNDP measures each year. The HDI is presenting as one indicator through the merge and integration of those sub-indicators. Therefore, each recommended action is not separated but integrated, improving the critical indicators directly in education, life expectancy, and GNI.

We can set out Kuwait's targets in Health, Education, and GNI area to formulate the scenarios. One assumption is that Kuwait will reach the targets by 2035.

We assume that all HDI values were fixed in 2019, and we've set the area target's rank in the 2nd or 3rd place. For life expectancy, the target is 79.0 years which is the second rank among the GCC countries in 2019. The targets of "expected years of schooling," "mean years of schooling," and "GNI per capita" are the third rank among the GCC countries in 2019. The other assumption is the HDI values of all countries are constant as 2019's. Based on these two assumptions, by 2035, in order to ensure that Kuwait's HDI value is within the 40<sup>th</sup> place, we suggest four steps of scenarios like in Table 12.

### 2) Conclusion

Since the HDI indicators are composed of indicators that are interested in the sustainable development and quality of life of human, social, economic, and environmental, they are entirely consistent with the seven pillars of KNDP 2020-2025 and eight multi-programs. The improvement of HDI is an indicator that reflects the sustainable development status of the country. As already listed, in just the last five years, Kuwait's HDI rank has decreased by six rungs (Figure 2), and the HDI value has not been changed for 20 years, while the other GCC countries' values were steadily increased (Figure 2) One). If Kuwait does not give attention to the improvement of Human Develop, in that case, it is possible to fall its ranking to the

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<sup>6</sup> In the KNDP, its' main target is to reach the 35th of the Global Competitiveness Index by 2035 (among 141 countries). Applying to the HDI, the target, 35th of GCI, is equivalent to 47th in HDI (among 189 countries).

second level group,<sup>7</sup> which is the opposite direction to Kuwait Vision 2035, because there are many factors to decrease if the efforts are not enough.

Efforts to increase the HDI indicator will not only directly help the realization of KNDP but also shorten the period to achieve the goal of Kuwait Vision 2035. Since the detailed indicators of HDI are very precise, it is of great help in the preparation of KNDP's detailed strategic action plan. Through detailed action plans, in the end, in 2035, it is possible to achieve results that far exceed the target set by the KNDP.

Therefore, if Kuwait intervenes appropriately for some of the variables strategically, the nine UNDP indexes, including HDI, IHDI, PHDI, WEI, GII, GDI, MPI, ESI, and SSI values, will be enhanced shortly through the implementation of the 13 recommendations. Because the 13 recommendations are suggested to overcome the challenges that we raised based on the comparison between the GCC countries, if the action plan is fully developed and supported by the government, the Kuwait Vision 2035 will be reached at high ranked global positioning soon.

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<sup>7</sup> There are four groups: “very high human development group,” “high human development group,” “medium human development group,” and low human development group. Kuwait’s HDI rank is 64th among 66 countries in very high human development group.

Table 12 Scenarios for enhancing the Human Development Index

Kuwait (Scenarios)	Life expectancy at birth (years)	Mean years of schooling for ages 25 and above (years)	Expected years of schooling (years)	GNI per capita (PPP US\$) <sup>4</sup>	Life expectancy index	Education index	Human development index (HDI) value	World ranking (Expected) <sup>5</sup>	Target year
2019	75.5	7.3	14.2	58,590	0.854	0.638	0.806	64	2019
Scenario 1	76.0	7.5	14.5	58,590	0.862	0.653	0.815	57	2025
<b>Scenario 2<sup>6</sup></b>	<b>77.0</b>	<b>8.0</b>	<b>15.0</b>	<b>58,590</b>	<b>0.877</b>	<b>0.683</b>	<b>0.832</b>	<b>48</b>	<b>2028</b>
Scenario 3	78.0	9.0	15.0	58,590	0.892	0.717	0.851	43	2031
Scenario 4	79.0 <sup>1</sup>	10.0 <sup>2</sup>	15.0 <sup>3</sup>	58,590	0.908	0.750	0.869	36	2035

(Notes)

1. Next to Qatar's (80.2 years) in 2019
2. Same mean years as Saudi Arabia's (10.2 years) in 2019
3. The third rank among the GCC counties in 2019
4. Fixed it as same as 2019
5. The ranks when it is applied on the ranking list of 2019
6. **Scenario 2 is equivalent with the target of the Kuwait Vision 2035**

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