

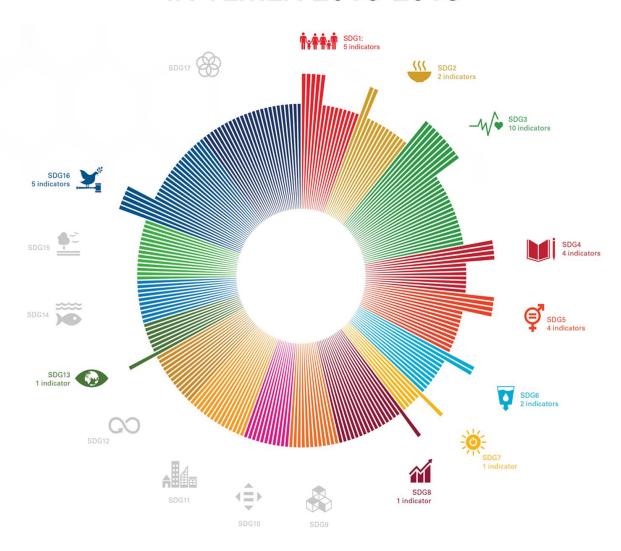






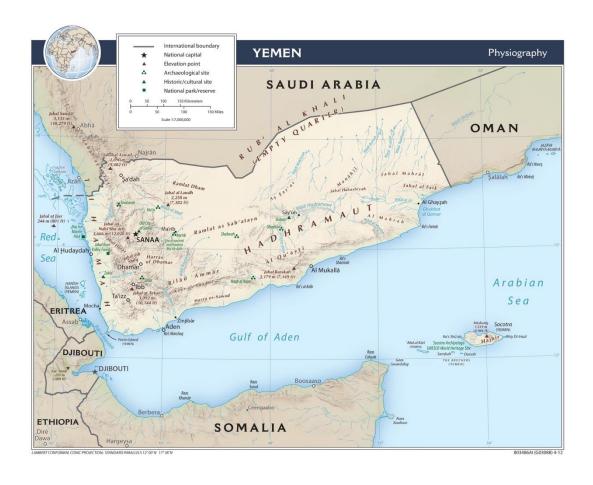
### THE SUSTAINABLE DEVELOPMENT GOALS INDICATORS REPORT

IN YEMEN 2016-2018





## THE SUSTAINABLE DEVELOPMENT INDICATORS REPORT IN YEMEN 2016-2018



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### **PREFACE**

The Sustainable Development Goals Report 2016-2018 reviews Yemen progress in the third year of implementation of the 2030 Agenda for Sustainable Development. This overview presents highlights of progress and remaining gaps for all 17 Sustainable Development Goals (SDGs), based on the latest available data, and examines some of the interconnections across Goals and targets.

While people overall are living better lives than they were a decade ago, progress to ensure that no one is left behind has not been rapid enough to meet the targets of the 2030 Agenda. Indeed, the rate of Yemen progress is not keeping pace with the ambitions of the Agenda, necessitating immediate and accelerated action by all stakeholders at all levels in Yemen.

Yemen realize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs, including education, health, social protection and job opportunities, while tackling climate change and environmental protection.

Government of Yemen do understand the importance of work toward SDGs as it is considered as one of the key references for The National Vision to build a modern state by 2030. This vision defined several initiatives and indicators for several projects, programs and plans in the field of economic, social, human and environmental development.

This report contains the available SDGS indicators and other national indicators for the period 2016- 2018, even though it is not introduced by UNDP, but it is needed and consider important to be captured in the official Yemen SDGs report. Accompanying these explanations are a clear set of figures and diagrams show the general trend in Yemen in the way to achieve the SDGs and define the weak and strong targets. These indicators are helping national strategies to focus and advance in the 2030 Agenda.

In doing so, it provides new and important evidence that highlights the central role of CSO data and information in achieving the SDGs and in underpinning sustainable development. The work performed in close collaboration with the support from several ministries and government organizations as well as from our partner ULTARE.

### CSO CHAIRMAN BRIEF

The interest of various countries in achieving sustainable development has increased over the past two decades. It is reflected in the development strategies and plans aimed at integrating social development, economic growth and environmental protection. Hence it is necessary to prepare national reports on the SDGs indicators, set by world leaders in September 2015 with the consensus of 193 UN member states. This agenda is a collection of 17 SDGs, associated 169 targets and a large number of indicators used to measure progress towards reaching the targets.

The report, prepared by Central Statistics Organization (CSO) in cooperation and contribution from UNFPA, provides an overview of the SDGs in Yemen, especially in the light of the extraordinary political and social conditions affected Yemen's economic and social life. The report includes clarifying strengths and weaknesses by reviewing indicators, providing data and reading results compared to other States' indicators.

The report examined the monitoring of the SDGs by indicators available for each of the 17 goals in the accordance with the Global indicator Framework for the SDGs and the targets of the 2030 Agenda for Sustainable Development, in addition to a set of national associated indicators. Each indicator includes five key components, i.e. definition of the indicator, direction of the indicator for the period 2016-2018, chart, assessment of the indicator, and future projections.

The CSO aim this comperhansive report, will serve as a reference for various decision makers and development policy planners, assisting them to identify actions needed to make progress in terms of sustainable development areas.

CSO acknowledge and express our thanks to UNFPA as one of the most substantial supporter of statistical work and a major partner for the CSO. Likewise, we express our thanks to our consultation company "ULTARE Consultation" who provide us with unlimited technical support.

Ahmed Mohammad Ishaq

Chairman - Central Statistical Organization

### 1. INTRODUCTION:

The SDGs are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, prosperity, peace, and justice. The 17 Goals are all interconnected, and in order to leave no one behind, it is important that we achieve them all by 2030.

From a wide-ranging consultation, the IAEG-SDGs group 17 SDGs that can be decomposed into 169 targets and a longer list of indicators. A first list of 304 indicators was published in March 2015<sup>1</sup>. Since then, the 2<sup>nd</sup> IAEG-SDGs meeting held in Bangkok in November 4-7, 2015 led to a new and streamlined list of 244 global indicators<sup>2</sup>. In order to help the Government of Yemen in computing those indicators the Central Statistical Organization (CSO) establish a team of consultants to examine the feasibility of computing those indicators related to Yemen. (Table 1)

### 1.1 Goals, Targets and Indicators of "Sustainable Development Agenda-2030"

This Agenda is a plan of action for people, planet and prosperity. including its 17 Sustainable Development Goals (SDGs) and 169 targets was adopted on 25 September 2015 by Heads of State and Government at a special UN summit. The Agenda is a commitment to eradicate poverty and achieve sustainable development by 2030 worldwide, ensuring that no one is left behind. The adoption of the 2030 Agenda was a landmark achievement, providing for a shared global vision towards sustainable development for all. The Goals and targets stimulate action over the next fifteen years in areas of critical importance for humanity and the planet (2030 Agenda, 2015):

### People

To end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.

### Planet

To protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action

<sup>1</sup> "Technical report by the Bureau of the United Nations Statistical Commission (UNSC) on the process of the development of an indicator framework for the goals and targets of the post-2015 development agenda - working draft" (PDF). March 2015.

<sup>&</sup>lt;sup>2</sup> "Results of the list of indicators reviewed at the second IAEG-SDG meeting" that can be found at <a href="http://unstats.un.org/sdgs/files/meetings/iaeg-sdgs-meeting-02/Outcomes/Agenda%20Item%204%20-%20Review%20of%20proposed%20indicators%20-%202%20Nov%202015.pdf">http://unstats.un.org/sdgs/files/meetings/iaeg-sdgs-meeting-02/Outcomes/Agenda%20Item%204%20-%20Review%20of%20proposed%20indicators%20-%202%20Nov%202015.pdf</a>

on climate change, so that it can support the needs of the present and future generations.

### Prosperity

To ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.

### Peace

To foster peaceful, just and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.

### Partnership

To mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.



FIGURE 1 THE KEY ELEMENTS TARGETED BY 2030 AGENDA (SOURCE; SDGS, 2016)

The Sustainable Development Goals (SDGs 2030) (2030 Agenda, 2015):

- Goal 1. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13. Take urgent action to combat climate change and its impacts\*
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

TABLE 1 SDGs GOALS, TARGETS AND INDICATORS

Goal	Name of Goal	Target	Indicators
1	No Poverty	7	14
2	No hunger	8	13
3	Good health	13	27
4	Quality education	10	11
5	Gender equality	9	14
6	Clean water and sanitation	8	11
7	Clean energy	5	6
8	Good jobs and economic growth	12	17
9	Innovation and infrastructure	8	12
10	Reduced inequalities	10	11
11	Sustainable cities and communities	10	15
12	Responsible consumption	11	13
13	Protect the planet	5	8
14	Life below water	10	10
15	Life on land	12	14
16	Peace and justice	12	23
17	Partnerships for the goals	19	25
Total		169	244

 $Source: \overline{https://www.un.org/sustainable development/sustainable-development-goals/}$ 



FIGURE 2 THE SUSTAINABLE DEVELOPMENT GOALS (SDGS 2030)

### 2 SECTION II REPORT METHODOLOGY

### 2.1 LEGAL FRAMEWORK (ROLES AND RESPONSIBILITIES)

The preparation and processing of SDGs indicators require identifying the roles and responsibilities of various ministries, government institutions, international and local organizations and the private sector. That is, legislation and legal frameworks for implementation of work, the integration of efforts and full coordination to produce accurate and recognized statistical indicators at the internal and foreign level. The legal framework includes:

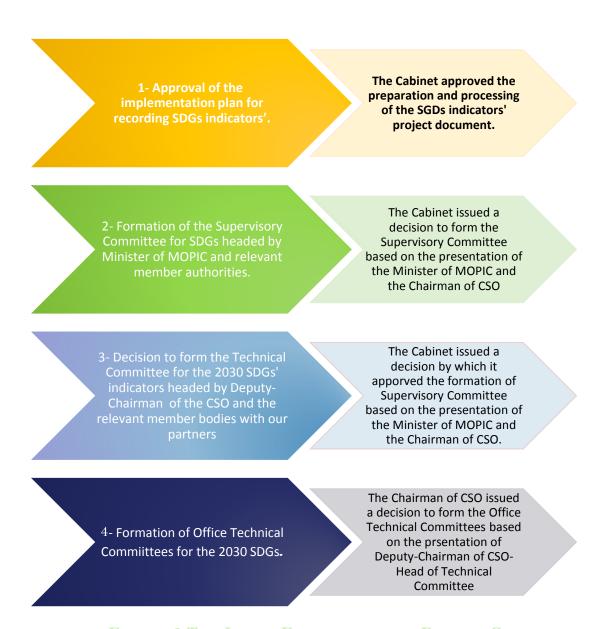


FIGURE 3 THE LEGAL FRAMEWORK FOR REPORT COMMITTEE

### 2.2 DATA SOURCES:

The SDGs cover 17 different goals covering a great number of socio-economic and natural dimensions that can be measured either at micro level (e.g. health or education) or at macro level (e.g. Inequality, Climate or Infrastructure). Given the wide variety of indicators it would not be a surprise to assert that the computation of those SDG indicators demands data from many sources, some easily available while other less so.

Broadly speaking, the different indicators could either come micro sources such as household survey or population census, or from administrative database such as compilation from different ministries. Among indicators that should be computed from household surveys or population censuses, we found out that some indicators were already computed, some could be easily computed from existing databases and finally, some more indicators could be estimated by adding questions to forthcoming household surveys or population censuses.

From our report, we found out that the most useful micro-level databases have been: The preparation of the SDGs indicators Report 2016-2018 in Yemen is based on various sources:



FIGURE 4 MAIN SOURCES OF DATA USED IN THIS REPORT

The SDG Index and Dashboards uses a mix of official data sources and non-official data sources. Official data correspond to data usually reported by national governments to international organizations. Official data usually involve a process to ensure comparability of concepts, data collection methods and results. Non-official data are typically collected by non-governmental actors (research institutions, Universities, NGOs, private sector) using different techniques (estimations, satellite imageries, expert surveys, others).

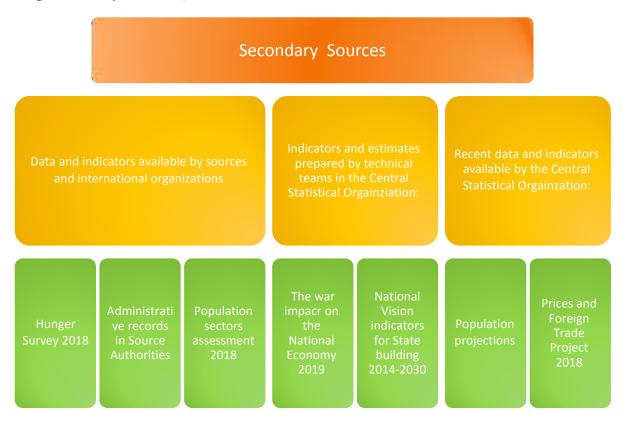


FIGURE 5 SECONDARY SOURCES OF DATA USED IN THIS REPORT

### 2.3 IMPLEMENTATION PHASES:

The preparation of this report is based on the implementation plan as following:

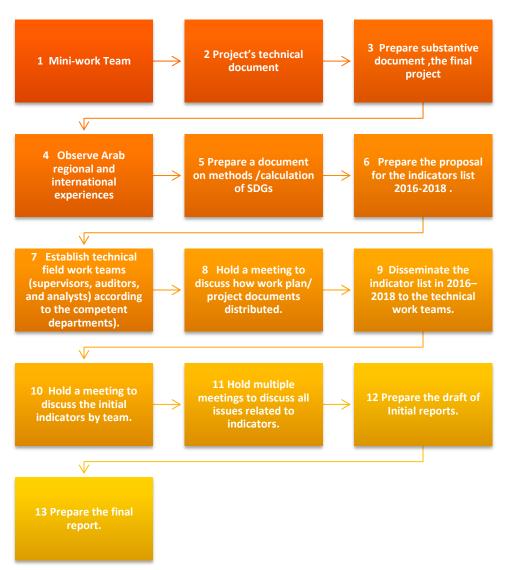


FIGURE 6 IMPLEMENTATION PLAN FOR CSO REPORT

### 3 SECTION III GOALS, TARGETS AND GLOBAL INDICATORS

### 3.1 MONITORING SDGs:

The CSO is responsible for monitoring and controlling the SDGs in cooperation with all relevant ministries, local national institutions and international organizations as well as concerned UN agencies. Thus, the CSO has made several institutional arrangements for the implementation of this project aiming at facilitating the monitoring of national sustainable development indicators on the social, economic and environmental sectors, in accordance with the national strategic vision and targets (Table 2). These indicators will be included in a database available for public use, policy planners, decision makers and various users, in addition to researchers, scholars and others.

The UN has encouraged government to set their own national targets and indicators to take into account national particularities. In order to stimulate the Governmental exercise, we are proposing a series of indicators deem important in the context of Yemen. Those indicators are proposal and additional ones are likely to come up in the forthcoming months, either from CSO, Development Partners or the Government of Yemen.

Out of 244 indicators, some of those global indicators are clearly not relevant to Yemen either in the time being or due to the war and conflict affected the country since March 2015. Once have 67 available and 33 national indicators, so we have in total 100 indicators we consider more relevant to Yemen. The gap analysis can be found in Annex I.

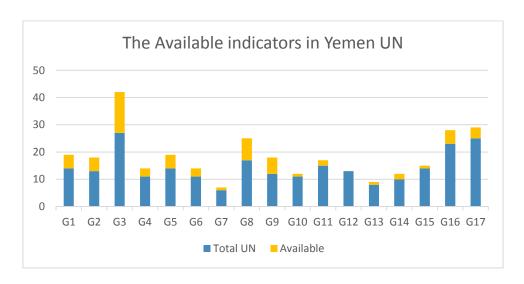


FIGURE 7 INDICATORS AVAILABLE IN THE REPORT 2016-2018 ACCORDING TO UN INDICATOR FRAMEWORK AND BY GOALS.

TABLE 2 SDGs Indicators Availability

		Total of			Availabilit	$\mathbf{y}$	
Target	Target	indicators (UN	Available				Not
Code	Name	indicator framework)	UN Frame	*%	National (Relevant)	Total	Available
1	Poverty	14	5	35.7	0	5	9
2	Hunger	13	5	38.5	3	8	8
3	Health	27	15	55.6	5	20	12
4	Education	11	3	27.3	5	8	8
5	Gender	14	5	35.7	2	7	9
6	Water	11	3	27.3	0	3	8
7	Energy	6	1	16.7	4	5	5
8	Economy	17	8	47.1	9	17	9
9	Infrastructure	12	6	50.0	0	6	6
10	Inequality	11	1	9.1	0	1	10
11	Urban	15	2	13.3	0	2	13
12	Consumption	13	0	0.0	0	0	13
13	Climate	8	1	12.5	0	1	7
14	Ocean	10	2	20.0	0	2	8
15	Forests	14	1	7.1	0	1	13
16	Justice	23	5	21.7	2	7	18
17	Global development	25	4	16.0	3	7	21
	Total	244	67	27.5	33	100	177

The percentage of indicators available in the report has been calculated by dividing them from the indicators of the United Nations Framework (not including relevant indicators)

### 3.2 YEMEN NATIONAL INDICATORS

As we said earlier, the IAEG-SDGs group encourage countries to localize their indicators by estimating country-specific indicators reflecting local context. In the case of Yemen, we are proposing some 33 additional indicators. With those proposed indicators, we now have 33 indicators although they are subject to revision after April 2020.

It should be noted that those 33 localized indicators should be seen as proposal subject to changes in the coming months. Furthermore, we strongly encourage the different Development Partners, Ministries and NGO's to come up with comments on these 33 indicators as well to propose others.

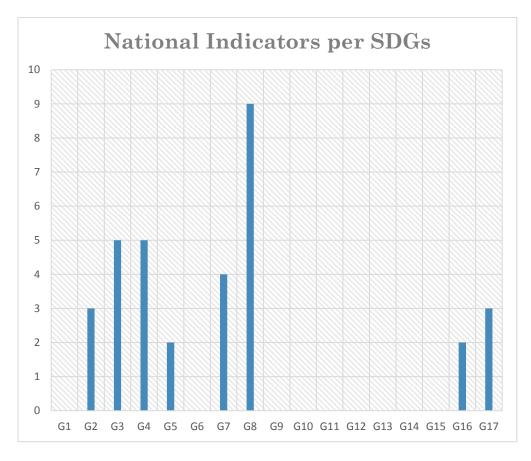


FIGURE 8 YEMEN NATIONAL INDICATORS

### 3.3 PROPOSED NEXT STAGES

Although this initial analysis on the feasibility of computing the numerous SDG indicators has been particularly enlightening, it should be considered a first exploratory stage. In particular, we noted that an important proportion of the indicators proposed by the IAEG-SDG group is still to refined and worked out by CSO either to be included in the next survey or to be adopted from the international statistics centers.

In other words, the actual list of indicators is far from being definitive. Officially no consensus yet has been achieved for 28 % of global indicators. Even among the so-called consensual global indicators (Table 2) a few are still to be defined.

Based on the CSO strategic plan (2019-2021), several limitation has been addressed associated with some proposed solution to enable the CSO to conduct and deliver complete, comprehensive and up to date statistics. It would hopefully solve many indicator issues although we believe the final list of indicators would not be ready before the final meeting next June 2020.

More formally, CSO proposing the following tasks for the coming months in order to complete an exhaustive feasibility study as well as putting those results in practice:

- 1. Set up a department or assign a team which will be responsible for SDG indicator framework, monitoring and reporting against targets. That department needs to work in close collaboration with line ministries and agencies on updating this "preliminary" assessment:
- 2. Revise the current assessment after March 2020 (latest report) and review the gaps including the latest definite list of SDG indicators approved by the UNSC;
- 3. Develop methodological guidelines in three separate booklets: Social, Economic and Environment. Those guidelines would detail very precisely how each indicator was computed. This is particularly important to ensure that the different indicators would still be computed the same way in 2030 as they were initially done in 2015. Otherwise overtime comparison would be deceptive;
- 4. Define baseline (2016) figures for all indicators that can be computed in a timely manner (the first three categories in Table 2). For the 177 indicators for which new data collection is needed, formal proposition would be made;
- 5. Carry out research studies to define realistic target for each indicator to be achieved by 2030;
- 6. Provide training for the relevant ministries and CSO in computing SDG indicators now and for the future;
- 7. Develop a website where all the relevant information could be found, including all results at all levels, documentation etc. should be established.
- 8. Lack of continuous capacity building programs due to lack of financial resources.
- 9. The war on Yemen, the suspension of salaries and capacity building programs.
- 10. Rapid and dynamic change at economic and demographic level is a major challenge to the statistical system

- 11. Need to cover new data and indicators requirements related to demographic and economic reality.
- 12. Lack of statistical data from the local institutions (data sources).

### 3.4 SOLUTIONS:

- ✓ To establish a high-level national commission to track the implementation of SDGs and their various dimensions .
- ✓ To unify and integrate sustainable data from sources by a national statistical system.
- ✓ To establish a national information platform or board to facilitate the communication and reporting of statistics that measure SDGs' indicators .
- ✓ To train and qualify national cadres and build statistical capacity in terms of sustainable development .
- ✓ To develop administrative and statistical records to meet the statistical needs for the new SDGs' indicators calculation.
- ✓ To make use of the fruitful statistical practices in term of developing SDGs.
- ✓ To ensure appropriate guidelines are developed confirming the quality of the collected and disseminated information.
- ✓ To improve collaboration between old and new data producers ensuring data users are involved, and global ethical, legal, and statistical standards of quality, privacy, and integrity are followed. That is, the basic principles of official statistics require commitment to integrity and confidentiality standards.

### 4 SECTION IV SDGS INDICATORS

This report provides a description of each SDG and its indicators, references milestones. The current status and the overall progress trend in Yemen of each SDGs. These findings are summarized across all SDGs and highlight where the official government institutions and international community (FDI, donors and supports), private and social sector need to focus and areas to be developed further.

The presentation of this evidence highlights the work of UNOPS and its partners in contributing to sustainable development in a range of countries and contexts around the world.

### 4.1 YEMEN SDGS INDICATOR SUMMARY TABLE

TABLE 3 YEMEN SDGS INDICATORS PROGRESS FOR THE PERIOD 2016-2018

Goal/ Indicator	2016	2017	2018			
Goal 1 : End poverty						
Population below the international poverty line. (9	%) 29.8	30.2	30.6			
population living below the national poverty line (%)	e. 76.9	77.9	77.8			
men, women and children living in poverty in all dimensions (%)	its 35.1	40.7	46.3			
Direct economic loss attributed to wars/ conflicts (Billion YR)	5.075	4.150	2.900			
Total government spending on essential services. (	%) 15.3	9.5	5.38			
Goal 2 :E1	nd hunger					
Prevalence of undernourishment (%)	35.0	36.1	39.7			
Prevalence of moderate and severe food insecur. (%)	ity 51	60	67			
Prevalence of stunting (children under 5) (%	) 46.5	46.5	46.4			
Prevalence of wasting (children under 5) (%)	16.3	16.3	16.4			
Agricultural area under productive and sustainab (%)	75.2	74.6	73.3			

Goal 3. Ensure healthy lives and promote well-being for all at all ages					
Maternal mortality ratio (Per 100.000 live birth) (%)	-	164	-		
Births attended by skilled health personnel (%)	64.2	72.4	81.7		
Under-5 mortality (Per 1000 live birth) (%)	55.0	55.0	55.0		
Neonatal mortality (Per 1000 live birth) (%)	42.90	42.90	42.90		
Tuberculosis incidence (Per 100,000 population ( Number	9412	9693	9784		
Malaria incidence (per 1,000 population) Number	43	63	-		
Hepatitis B incidence (per 1,000 population)  Number	-	1925	-		
Mortality attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease . (%)	4.200	4200	4200		
Suicide mortality (%)	0.5	0.5	0.5		
Death due to road traffic injuries (%)	1086	1178	-		
Women who have their need for family planning satisfied (%)	-	-	38.0		
Prevalence of current tobacco use among persons aged 15 (%)	1.85	1.86	1.87		
Target population covered by all vaccines (%)	75.1	73.7	71.6		
Health worker density (Per 1000 live birth) (%)	0.47	0.49	-		
Goal 4. Ensure inclusive and equi	table quality	education			
Participation rate in organized learning (%)	4.14	4.47	-		
Participation of youth and adults in education (%)	-	-	65		
Average number of students per class (Number)	37	37	37		
Goal 5. Achieve gender equality					
Women who were married before 15 and 18 (%))	-	-	9		
Population with agricultural ownership (%)	12.79	12.76	12.73		
Individuals who own a mobile telephone (%)	60.49	55.18	55.18		
Goal 6. Ensure availability and sustainable management of water					

Population using safely drinking water (%)	36.4	37.9	37.7
Population using safely managed sanitation (%)	25.3	26.9	28.8
Per capita share of renewable water (Cubic Meter)	77	74	73
Goal 8 . Promote inclusive and sustain	nable econom	ic growth	
Annual growth of real GDP per capita (%)	-14.61	-9.96	-1.35
Annual growth of real GDP per employed person (%)	-24.5	-10.5	-5.6
Unemployment (%)	33.8	31.9	29.9
Commercial banks ( per 100,000 adults ) ( Number)	18	18	-
Automated teller machines ( per 100,000 adults Number)	-	-	1002
Adults (15 +) with an account at a bank (%)	14.6	20.1	19.6
Goal 9. Build resilient inf	rastructure		
Manufacturing value added % of GDP and per capita	11.2	11.2	10.8
Manufacturing employment % of total employment	5.5	5.5	5.5
Small-scale industries in total industry value added (%)	32.5	34.0	35.5
CO2 emission (Kilo ton)	12320	14.200	15.400
Researchers ( per million inhabitants) ( Number)	27	27	31
Patents (per million people) (Number)	16	15	-
Goal 11. Make cities and human settlen	nents, safe and	sustainable	
urban solid waste regularly collected (%))	1.683	1.751	1.786
Goal 14 . Conserve and sustainably use the oceans, seas and marine	-	-	-
Coverage of protected areas to marine areas (000 To)	1.4	1.4	1.4
Annual fishing (Ton)	21.197	31.210	22.071
Goal 15. Protect of terrestri	ial ecosystems		
Land that is degraded over total land area) (%)	24.1	24.1	24.2

Goa; 16. Promote peaceful and inclusive societies						
IDPs (Number)	635.406	327.924	730.068			
Retunes (Number)	267.360	131.694	175.728			
Children under 5 whose births have been registered (%)	13.5	14.9	-			
Goal 17. Strengthen the Glol	oal Partnershi	p				
Total government revenue % of GDP.	16.9	16.8	16.7			
Volume of remittance % of total GDP	25.4	23.3	24.9			
Individuals using the Internet (per 100 of population) (%)	24.9	26.7	25.8			

### 4.2 YEMEN SDGS INDICATOR DATA

The Central Statistical Organization (CSO) of Yemen evaluated the SDGs indicators as of 2016-2018 and alternative period using official and administrative statistics in detail. The output form this report will be presented as:

- ✓ Provide a statistical database of SDGs indicators plan 2016-2030 at population, social, economic, demographic and environmental levels.
- ✓ Provide, monitor and analyze the available SDGs indicators 2016-2018 in Yemen according to the Global indicators Framework for the objectives and targets of the Sustainable Development Agenda 2030 by four quadrants:
  - Indicator's definition
  - Indicator's direction
  - Indicator's assessment
  - Future prospects
- ✓ Softcopy and hardcopy can be provided to the local or international partners.

# SUSTAINABLE DEVELOPMENT GOALS INDICATORS PROGRESS IN YEMEN 2016-2018

# 1 NO POVERTY

### 1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

### **Definition of the Indicator:**

The (International Poverty Line) is the lowest level of income deemed adequate in a particular country

The international poverty line was defined as \$1 per day per capita. In 2008 the World Bank updated this IPL to \$1.25 a day at 2005 purchasing-power parity (PPP). Finally, it was updated to \$1.90 a day as of 2015 in prices of 2011.

### https://blogs.worldbank.org/ar

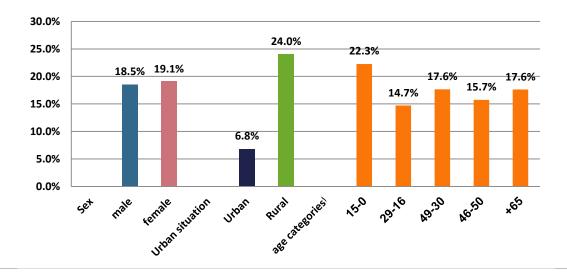
### Trends of indicator:

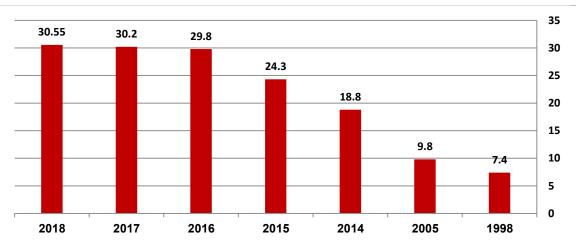


The proportion of the population living in poverty has increased steadily over the years from 1998 until the escalation of aggression in 2014. As one can imagine the increase in the number of population living in poverty is even more pronounced after the collapse of all economic fundamentals, the loss of several sources of income and the destruction of State institutions and economic sector. It should be noted that the proportion of population living in poverty based on the national poverty line 2014 was 48.6%, while the proportion of poor people calculated on the international poverty line at \$1.9 at that time was 18.8%, although the value of the exchange rate calculated at the national and international poverty lines in 2014 was nearly the same, while poverty at the end of 1997 was 76.9%. It is therefore expected the proportion of people below the international poverty line will roughly reach 30.5% as of the end of 2018.

Figure (1): Proportion of the population below the international poverty line, by sex, age and urban status -2014Source: HBS 2014

Figure (2): Proportion of the population living below the international poverty line 1.9 \$, 1998-2018.





Source: HBS 2014 & the searchers' estimates in CSO

### **Evaluating the indicator:**

International comparisons are difficult to be carried out for several reasons, namely lack of latest surveys. According to the World Bank's International poverty ratios for 2018, by the value of Yemen's 18.8 calculated CPI, Yemen ranked seventh globally after South Africa, where poverty was 18.9, and Ethiopia's 26.7% for 2015. But there is no doubt that the war in Yemen has had a significant impact, leading to about 30% of the population being below the international poverty line and considered to be the highest rate on Arab level.

Source: https://sdg-tracker.org/no-poverty

### **Future Prospects:**

The Proportion of population living in poverty is expected to grow at an accelerated pace, given all warnings of Yemen's economic deteriorates further due to on-going war, the fear of a catastrophic deterioration in the lives of Yemenis, the reports predicting Yemen will be the world's poorest country in terms of the rise of population under the national poverty line, and the decline of exchange rates since 2014, it is much likely that the poverty rates to increase in successive way..

### 1.2.1 Proportion of population living below the national poverty line, by sex and age

### **Definition of the Indicator:**

The national poverty Line is the lowest level of income deemed adequate in a particular country. The absolute or international poverty line is defined as the minimum level of income and spending per capita to secure basic food and non-food needs related to housing, clothing, education, health and transport. According to HBS 2014 data, the overall absolute poverty line (food and non-food poverty) was YER 13,544 per capita, i.e. 544,13YER per capita per month, equivalent to about \$2.07, as measured by national prices.

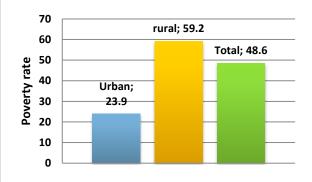
Source : Handbook on Poverty and Inequality - ISBN: 9780821376133

### <u>Trends of indicator:</u> ■



Although the proportion of people living in poverty has been increasing between 2005 and 2014 due to the war and its impacts on the destruction of a fragile economy, the proportion of the people living in poverty has sharply increased between 2014 and 2016, affecting all segments of Yemeni society. While poverty rates differ slightly between men and women, the difference was more pronounced in urban and rural areas (23.9%, 59.2%) respectively. That is, the proportion of the people living in poverty is larger in rural areas than urban. Also, it is noticed that the (children) recorded age groups percentages of living in poverty than other age groups at national level, that estimated in 2018 to around 79% of population living under poverty line. report released by UNDP says that in the absence of conflict Yemen could have made progress toward achieving the Sustainable Development Goals, the global anti-poverty framework agreed in 2015 with a target date of 2030.

Figure (3) ratio of poverty in rural and urban areas -2014Figure (4) ratio of poverty among women and men -2014



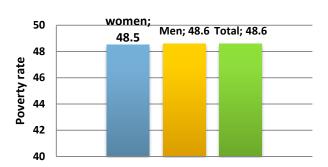
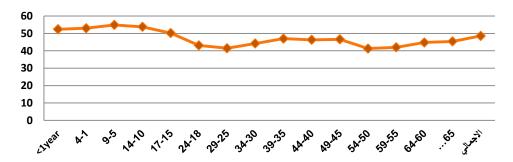
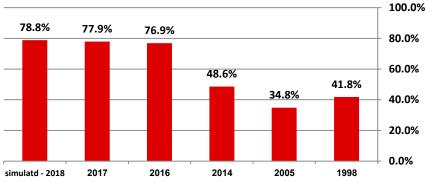


Figure (5) ratio of poverty by age groups 2014



Source: HBS 2014

Figure (6) Proportion of people living in poverty below the national poverty line 1998-2018



Source: HBS 2014, WB estimated 2016 and CSO estimates 2017-2018...

### **Evaluating the indicator:**

It is difficult to conduct International comparisons for several reasons, but based on the World Bank's 2018 International poverty ratios, Yemen's ratio was 48.6% in 2014, so Yemen ranked the 20th in the world. Taking the indicator of 2016 amounting 76.9%, Yemen jumps to the second worldwide. After 2016, the estimates warn that Yemen will top the ranking globally in terms of proportion of people living below the absolute poverty line if the war continues, i.e. Ethiopia 23.5%, Sudan 46.5%, Egypt 27.8%, Jordan 14.4%, and Iraq 18.9%.

 $Source: \underline{https://sdg-tracker.org/no-poverty}$ 

### **Future Prospect:**

Unfortunately, prospects do not augur well for immediate economic ease if war continues in Yemen. UNDP warned that "if fighting continues through 2020, Yemen will rank as the poorest country in the world," the report, Assessing the Impact of War in Yemen on Achieving the Sustainable Development Goals (SDGs), says

The report clarified that 79 percent of Yemen population living under the poverty line, and 65 percent classified as extremely poor.

The report projected that Yemen by 2022 to have the largest poverty gap in the world, i.e. the distance between average income and the poverty line.

Source:

 $\frac{https://www.ye.undp.org/content/yemen/ar/home/library/assesing-the-impact-of--war-on-development-in-yemen-sdgs.html}{}$ 

### 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions, according to national definitions

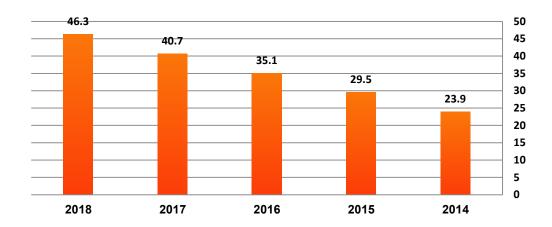
### **Definition of the Indicator:**

This indicator has three dimensions, i.e. health, education and living standard, using ten indicators to measure different dimensions. A household is considered being in poverty if deprived of 30% of the total indicators' weights.

### Trends of indicator:

Based on the latest demographic survey carried DHS 2013, the indicator's out in Yemen, i.e. results showed that there was a deprivation from (education, health and living standards) %30.7 accounting for (%28.3, and %41.0) respectively. In total, the proportion of households suffering from multi-dimensional amounted about 23.9% for 2013. That is the available data on multi-dimensional poverty.

Figure 7: Proportion of households living in poverty in all its dimensions 2014-2018



- Source: http://hdr.undp.org/en/2019-MPI - and The researcher's estimates for 2017 & 2018...

### Evaluating the indicator:

In comparison with a number of Arab countries including Algeria, Egypt, Iraq and Syria, the multidimensional poverty accounted for 0.3%, 0.6%, 1.3% and 1.2%, while in Yemen it is higher in Yemen, accounting for 23.9%. The closest countries Yemen terms to in multidimensional poverty indicator were Zambia, Uganda, Rwanda and Pakistan, accounting for 24.2%, 24.1%, 22.2% and 21.5%, respectively.

http://hdr.undp.org/en/2019-mpi.

### **Future Prospects:**

In 2016, the deprivation indicator of multidimensional poverty is expected to increase to roughly 35.12% in 2016 (as a base year), assuming that there is a correlation relationship between the proportion of households living below the poverty line accounting for 76.9 percent in 2016.

### 1.5.2 Total economic losses generated by war/conflict

### **Definition of the Indicator:**

The losses caused to GDP and the economic opportunities costs generated by war and conflict by estimating the GDP contraction as of 2014.

Exchange rate = YER250 per USD1.

### Trends of indicator:

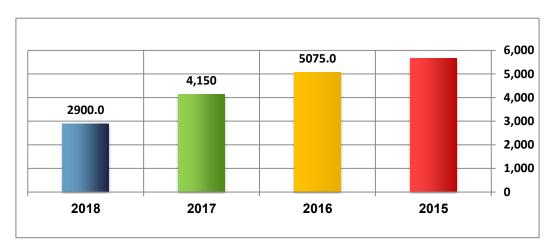
During 2015-2018, the cumulative economic losses amounted to roughly YER (15.4) trillion, equivalent to USD (71.5) billion.

The losses reached approximately YER (5,075) billion in 2016, YER (4,150) billion in 2017, and YER (2,900) billion in 2018.

(Exclude material and human losses)

Source: GDP Bulletin - CSO December-2018

Figure (8) Total economic losses of YR 1 billion ,2015-2018



### **Evaluating the indicator:**

During 2015-2018, the losses amounted to YER (15.4) trillion, i.e. USD (71.5) billion at an average exchange rate of 250 YER per USD 1. The average losses reached USD (18) billion per year, while the average of annual losses of Syrian economy amounted to roughly USD 28 billion during 2011-2018.

Source: World Bank- Analytical study of war losses in Syria

### **Future Prospects:**

The losses of the national economy are expected to continue due to the disruption of air, land and sea outlets and halt production of other economic sectors. However, losses would gradually tend to relative stable.

### 1.a.2 Proportion of total government spending on essential services (education, health and social protection)

### **Definition of the Indicator:**

This indicator refers to the sum of what the Government actually spent in a year on the essential services, i.e. education, health and social protection in local currency divided by the total government spending on all types of services.

Total government spending on education, health & social protection x100

Total government spending on all services

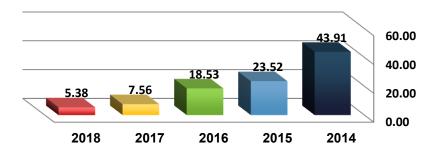
(Exclude what has been allocated for these services but include what has been actually spent)

### Trends of indicator:

The below figure shows a steady annual decline since 2014. The government spending on essential services in 2014 amounted (43.91%) of total government expenditure, while it accounted for (5.38%) of total expenditure 2018. government in Comparatively, the amounts spent on basic services, i.e. education, health and social protection) amounted to (YER 1,182.126 million) in 2014, whereas it dropped to YER 76.76 million or 85.39% in 2018. Consequently, the delivery of services has deteriorated or ceased due to the economic situation the country is experiencing under blockade. Consequently, the Government has taken many procedures to reduce expenditures because of the lack of income in order to cover expenditures. In addition, they are covered by annual humanitarian assistance based on priority and needs.

Source: Statistical Yearbook 2017.

Figure (10) Proportion of total government spending on essential services (education, health and social protection) 2014-2018.



### **Evaluating the indicator:**

2015, the proportion of total government expenditure in some countries such as Djibouti, Sudan and Mauritania amounted 14.1%, 2.4%, and 7.3% respectively. While it reached 3.7% in Yemen and 5.3% in Syria. Also, the proportion of government spending for 2016 in the three countries accounted for 12.3%, 10.8% and 9.3%. In comparison, Yemen has larger proportion than the three countries, accounting for 15.13%. In Surya, it amounted 19.2%. The negative regression of the proportion in Yemen is due to the absence of budgets and funds to cover such expenses, especially government spending on basic services, i.e. education, health and social protection. Unlike Yemen, the mentioned three countries enjoy stability and absence of war.

Source: - Statistical Appendices - The Unified Report - Arabian countries indicators

### **Future Prospects:**

It is expected to get data for measuring this indicator at an appropriate time per year. After the burial of the ongoing war in the country, the State's General Budget will be supported, leading to the increase of financial allocations for expenditure on such expenses.



#### 2.1.1. Prevalence of undernourishment

#### **Definition of the Indicator:**

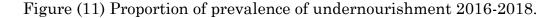
An estimate of proportion of the whose normal food consumption is not sufficient to provide the levels of food energy required to maintain a healthy, active and normal life. It is expressed as a percentage.

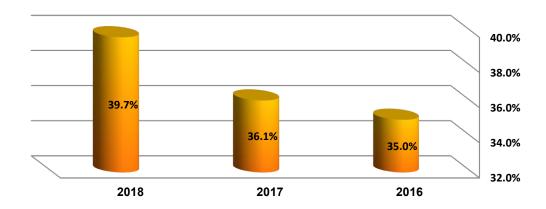
It is expressed in the following probability function:

PoU =  $\int_{-\infty}^{\infty} (x < MDER) f(x | DEC; CV; Skew) dx$ The equation of the probability function indicates the prevalence of undernourishment as hunger, and it is determined by four indicators, i.e. undernourishment, child wasting, child stunting and child mortality.

#### Trends of indicator:

The situation of Yemeni undernourished people been exacerbated by the continuing devastating war and blockade, which has also generated economic crisis and reached unprecedented levels of food insecurity and malnutrition. higher annual inflation. dramatically risen food prices. increased unemployment, declined incomes. Imports have fallen which reduced the availability of food commodities. The UN hunger/undernourishment indicators, through survey results and statistical reports for 2016-2018, show an increasing rise in the number of Yemeni people suffering from hunger or nutritional deficiency. In 2016, the proportion of Yemeni undernourished people has reached a very high rate of 35%. In 2017, it rose to 36.1%, while it rose to 39.7% in 2018. These rises in the proportions of indicators will continue to rise as long as the war and blockade on Yemeni people continue, and their suffering will rise and bring people to the brink of famine...





#### Evaluating the indicator:

Compared to Yemen, Yemen has achieved very low levels, according to the UN World Hunger Indicator report of 2016, Yemen has been the world's top Arab country with a sixth place in the world, with a average total of 35%, and in the 2017 report Yemen was the world's No. 114 and the world's most starving Arab country with an average total of 36.1%. With a slight difference from Sudan (No. 113 internationally), the second most hungry Arab country, with an average total rate of 32.7%. In the 2018m report, Yemen (No.

#### **Future Prospects:**

The proportion of Yemeni population suffering from hunger or malnutrition is expected to rise and their suffering will increase and reach the edge of famine, as long as the war and blockade continue on the Yemeni population. Hunger and malnutrition remain a major impediment to Yemen's development. This is not in line with any achievements in the Sustainable Development Goals (SDGs) in ending all forms of hunger and malnutrition by 2030, and ensuring that all people, especially children, have access to

117 World) was the most starving Arab country with an average total rate of 39.7%. With a slight difference from Sudan (No. 112 internationally), the second most hungry Arab country, with an average total rate of 34.8%. The country of Comoros (No. 101) was the third most starving Arab country by obtaining a medium total rate of 30.8%, and these reports showed that Yemen is one of the world's most suffering countries with food shortages, defeats and defeats.

adequate and nutritious food all year round. The international community, represented by the UN and others, should accelerate the provision of food and therapeutic assistance to the Yemeni population in the light of the ongoing war and the unjust blockade.

# 2.1.2: Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale

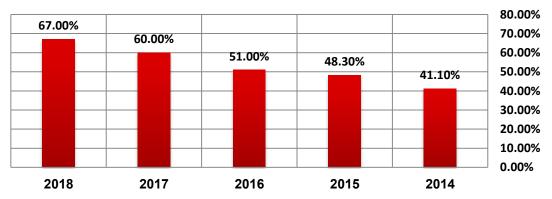
#### **Definition of the Indicator:**

The indicator measures the proportion of individuals in the population who have experienced food insecurity at moderate and severe levels during the reference period.

#### <u>Trends of indicator:</u>

The food security situation among the Yemeni population is deteriorating to a very worrying degree. According to the results of the Integrated Interim Classification of Security prepared by the United Nations organizations in Yemen, indicators of food insecurity in Yemen witnessed rapid increasing during (2014-2018), in 2014 the percentage of the Yemeni population suffering from food insecurity increased by (41.1%), and in 2015, which was the start of the war on Yemen, the rate of food insecurity among the Yemeni population increased to (48.3%) and due to the continuation of the war and the siege on Yemen during the following years, the percentage of the Yemeni population suffering from food insecurity increased in 2016 to (51%), and in 2017 it rose The ratio attributed to (60%), an increase of 20% compared to the previous year 2016, and in 2018, the suffering of the Yemeni population was exacerbated to an extremely dangerous degree, as the percentage of the population suffering from food insecurity reached (67%), which means that (20124000) people needs urgent humanitarian interventions.

Figure (12) Prevalence of moderate or severe food insecurity in the population, 2014-2018.



Source: The Integrated Interim Classification of Food Security (IPC), FAO Organization and its partners from international organizations and government institutions - Yemen

#### Evaluating the indicator:

According to the Global Report on Food Crises 2019, Yemen ranked first among the eight worst countries in the world suffering from food crises and severe food insecurity during 2018. showed The report the close relationship between wars and food insecurity, and Yemen was also ranked first among a group of countries most affected by conflict, as the population of Yemen suffering from food insecurity as a result of war and conflict reached more than 20 million people..

#### **Future Prospects:**

It is expected that the acute food insecurity rates will increase for the population of Yemen and the increase in the population who will suffer the tragic and catastrophic humanitarian and living conditions that threaten to reach the specter of starvation in light of the continued escalation of the war and the blockade on Yemen and their disastrous impact on all different sectors even with the presence of food assistance, provided by some United Nations organizations, that does not meet the required level Acute food insecurity rates will increase from year to year.

#### 2.2.1 Prevalence of stunting (height-for-age <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age

#### **Definition of the Indicator:**

The prevalence of stunting is the percentage of children aged 0 to 59 months of <-2 z-scores standard deviation of average height-for-age according to the WHO Child Growth Standards 2.

#### <u>Trends of indicator:</u>

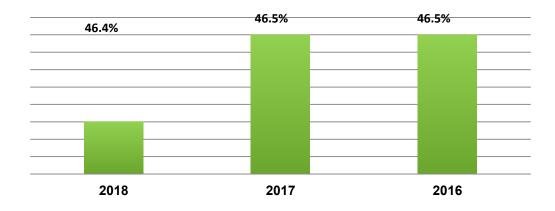


Indicators indicate that the prevalence of chronic malnutrition (stunting) among children under 5 yearsheight-for-age indicator- for 2016-2018 rose to very alarming levels of major concern.

According to UN reports on the State of Food Security and Nutrition status in the world, the indicators showed that chronic malnutrition (stunting) among children under 5 years during 2016 and 2017 reached the proportion 46.5%. same asIn 2018, the prevalence of chronic malnutrition/stunting among children under five years amounted to 46.4%.

The main determinants of stunting include: maternal health at risk before and during pregnancy and during the feeding phase, inadequate breastfeeding, poor feeding practices for infants, children and young children, and unhealthy environments for children, including poor hygiene and poor sanitation, in addition to chronic food insecurity and poverty.

Figure (13) Prevalence of stunting among children under five years of age 2016–2018.



Source: The State of World Food Security and Nutrition (2016-2018), FAO-WFP-UNICEF-IFAD-WHO

#### **Evaluating the indicator:**

The prevalence of chronic malnutrition/stunting among children under five years of age, i.e. height-for-age indicator is unacceptably high, accounting for (46.4% - 46.5%). Yemen ranked the first Arab position in terms of children suffering from the highest rates of stunting. It is among the worst four countries in the world whose children suffer from the highest rates of stunting, namely Burundi 55.9%, East Timor 50.9% and Guatemala 46.7%.

#### **Future Prospects:**

In Yemen, stunting rate is expected to mount up among children under 5 years of age during the coming years as long as the war and blockade on Yemen persist. The SDGs' goal to reduce child stunting will not be achieved if the current trends continue as of 2030. To reduce stunting, it is necessary to concentrate nutritional interventions for pregnant women and children aged 2, as well as improving mothers and children access to high-quality health services.

# 2.2.2 Prevalence rate of malnutrition (weight-for-height <+2 or >-2 points of the standard deviation from the average growth standards adopted by WHO among children under five years of age, by type (wasting)

#### **Definition of the Indicator:**

Wasting is the percentage of children aged 0 to 59 months below -2 standard deviation of the average weight-for-height, according to WHO child growth standards.

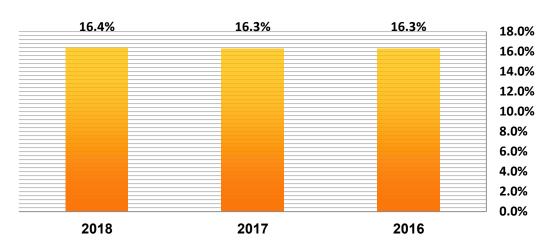
The excess weight in childhood is the percentage of children aged 0 to 59 months of over 2+ standard deviation of average weight-for-length, according to WHO child growth criteria.

#### Trends of indicator:

malnutrition/wasting Acute is major consequence of severe food insecurity continued war and blockade on Yemen. It has reached to alarming levels of a serious chronic problem that Yemen will suffer from for long time. Indicators of prevalence of acute food insecurity/wasting among children under five years old (weight-for-height) in 2016-2018 have reached very dangerous levels. In 2016 and 2017, children under 5 years old accounted for 16.3%. The prevalence of overweight among children under 5 years of age (2016 and 2017) amounted to 2%. In 2018, the incidence of acute malnutrition (wasting) increased relatively among children under 5 years of age. The prevalence of overweight for children under 5 years of age has increased during the last two years to 2.5%. This means that more than 2 million children under five years of age are acute malnourished and face

a mounting risk of disease and death.

Figure (14) Prevalence rate of (acute malnutrition/wasting) among children under 5 years of age 2016-2018



Source: The State of World Food Security and Nutrition (2016-2018), FAO-WFP-UNICEF-IFAD-WHO

#### **Evaluating the indicator:**

Malnutrition rate in Yemen is one of the highest in the world, threatening the future of millions of Yemeni children and Yemen as a whole. Children under five years of age have reached over 16%, exceeding the emergency thresholds set by WHO of 15%. Yemen, along with Sudan and Djibouti, are among the world's most acute malnourished children, with the rates 17% in Sudan and 22% in Djibouti.

#### **Future Prospects:**

The SDGs aim to end all forms of hunger and malnutrition by 2030, but the prevalence of acute malnutrition rates among children are expected to mount up and deteriorate further, especially as the war and blockade on Yemen continue. The State and international organizations have a great deal of effort and attention to address acute malnutrition at health centers, at household level and to make urgent interventions by providing supplementary feeding to children. In terms of increasing the weight of children, it is striking that no country in the world has made progress in reducing the levels of weight and obesity over the past 20 years.

Key note: The CSO considers this indicator to be much greater than mentioned in the source report.

#### 2.4.1: Proportion of agricultural area under productive and sustainable agriculture

#### Definition of the indicator:

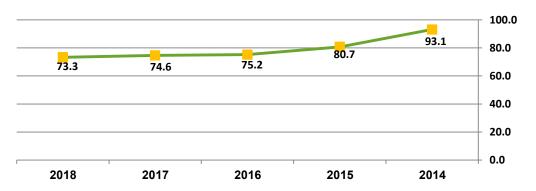
The indicator is defined by the following formula: Percent of land under productive and sustainable agriculture Area under productive sustainable agriculture divided Agricultural area where agricultural area is defined as arable land, permanent crops and meadows and permanent pastures. This indicator shows how much is the total agricultural area occupied by planted area out of the total productive area land.

#### Trend of the indicator:



This indicator shows a reduction in the proportion of under agricultural area out of (constant) agricultural area during 2014-2018. There was a significant decrease in 2014 compared to 2015, accounting for 12.4%. The decrease in the agricultural area amounted to (5.5%) in 2016, compared to the previous year 2015. The difference between the relative decrease in the agricultural area for the last three years from 2016 to 2018 was a slight drop of 0.6% between 2017 and 2016 as well as (1.3%) between 2018 and 2017.

Figure (15) Proportion of agricultural area allocated to productive and sustainable agriculture 2014–2018



Source: Statistical Yearbook, several issues by the Central Statistical Organization (CSO). Data from Ministry of Agriculture & Irrigation.

#### Evaluating the indicator:

The agricultural land area declined at the country level due to several factors, including: scarcity of irrigation water resulted from the lack of renewable water resources and rain and high cost of water saving. Also, the improper practices in land use, increasing the amount of used pesticides and chemical fertilizers killing living bacteria and aquatic organisms in agricultural soil, whose presence is necessary for soil fertility and organic analysis. As a result, the soil characteristics changed and organic components lost. Consequently, degradation of fertility and low productivity of lands, resulting in an expand in desertification and loss of economic value of agricultural land.

#### **Future Prospects:**

Under the conflict and war in Yemen, the State is working to reduce importing and exporting of the requirements and products needed for the agricultural process. The State is trying to reduce the continuing decline of agricultural land area by maintaining a guiding policy for farmers, providing agricultural seeds as well as providing safe pesticides, fertilizers, etc. However, this decline will continue over the next few years unless the barriers are resolved, and the war and blockade of Yemen end.

#### **Arable Lands**

#### Definition of the indicator:

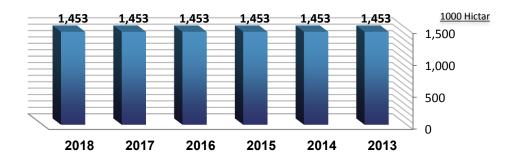
It is the total arable land area under productive and sustainable agriculture, including permanent crops and permanent meadows and pastures lands (below five years).

The indicator is linked to land use for agricultural activities and to the extent that agricultural activity provides an acceptable level of food security for population. In addition, the extent this activity contributes to the environmental impact on reducing the effects of gas emissions and various population activities.

#### Trend of the indicator:

There is no significant increase in this indicator over the past period (2013-2018) and has remained constantly at 1,453 hectares, accompanied by a small decrease in agricultural land, where there is little effort in land reclamation. Several factors include harsh natural conditions, lack of adequate natural water for irrigation, relative increase in desertification and land degradation, and improper and unsafe use of pesticides and fertilizers because of lack of sound and sustainable land management.

Figure (16) Arable Lands in 000 ha 2013-2018



Source: Statistical Yearbook, several issues by the Central Statistical Organization (CSO). Data from Ministry of Agriculture & Irrigation

#### **Evaluating the indicator:**

Yemen has vast agricultural land through which arable land can be increased, but this is linked to the availability of the necessary financial means, the reduction of the desertification and degradation of agricultural land, as well as the availability of modern techniques for land reclamation. Water are also available even under the annual reduction of renewable water. Yemen is thus different from other countries in this regard.

#### **Future Prospects:**

The arable area is expected to relatively stabilize in the short term, after that this area begins to decline gradually due to the annual decrease in the level of groundwater and renewable water and the increase of desertification, land degradation and salinization, especially in coastal areas such as Tehamah region and others. The State must therefore work to preserve and increase the area of arable land through the development of sound and comprehensive management policies and programs, aiming at the rehabilitation, sustainability and expansion of the arable land.

#### Average of agricultural area per capita

#### **Definition of the indicator:**

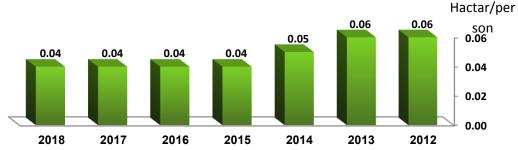
The average of arable area per capita can be obtained by dividing the total agricultural area under the population (ha/person).

This indicator measures the level of increase/decrease in arable area per capita cultivated area under the annual population increase and changes in the area under cultivation. This indicates the availability or lack of food security of the population.

#### Trend of the indicator:

This indicator shows a slight rise followed by a decline in the average of arable area per capita during 2012-2018. That is, there was a slight increase in 2012 and 2013, accounting for (0.02) hectares/person. In comparison, the data were staple during 2015 to 2018, amounting (0.04) hectares/person in the last four years. Thus, there has been an increase in the arable area during 2015-2018, but this increase has been accompanied with a significant increase in population as a result of the annual increase in the country's growth rate of population

Figure (17) Average cultivated area per capita (ha/person) (2012-2018)



Source: Ministry of Agriculture & Irrigation & the population projections for (2005-2020)- CSO

#### **Evaluating the indicator:**

Yemen is famous for its agriculture and soil fertility. However, during last period of war and blockade on Yemen from 2015 to 2018, agriculture was not at its best for many reasons, including the scarcity of water resources, lack of rainfall, high prices and cost of water for irrigation due to shortages and cutoffs in the imports of diesel and petroleum for agriculture. Also, it is difficult to import spare parts and equipment required for agricultural work, as well as the difficulty of importing suitable and safe pesticides, fertilizers, etc. On the other hand, there has been an annual increase in the population. All of these factors have led to a decline of this indicator.

#### **Future Prospects:**

The average per capita share of the arable area is expected to decline in terms of value over the next few years, as a result of the continuing war and the non-elimination of the war negative effects on agriculture, as well as the continuous degradation of agricultural land due to soil erosion due to floods and desertification and lack of adequate water for irrigation. The annual population growth rate in Yemen also rose up. The State and society must reduce the increase and aggravation of these factors, which adversely affect agriculture as well as the sustainability of the food insecure population.

#### Use of agricultural pesticides (per hectare of agricultural area)

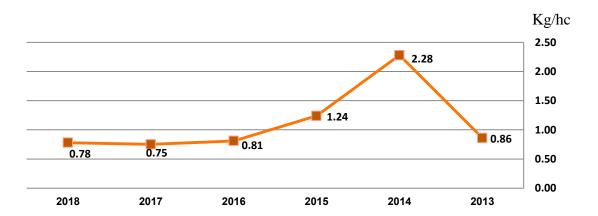
#### **Definition of the indicator:**

It is the extent to which agricultural pesticides (used quantity) are used per unit of agricultural land area. This indicator assists to measure the extent to which agricultural activity contributes to influencing ecosystems through the use of different chemicals in the form of agricultural pesticides that contribute to damage to soil and groundwater quality.

#### Trend of the indicator.

The indicator of agricultural pesticide use declined during 2013 to 2018. That is, pesticide use increased from (0.86) kg/ha in 2013 to (2.28) kg/ha in 2014, i.e. an increase of (1.42) kg/ha. It then declined to (1.24) kg/ha in 2015, decreasing to (1.04) kg/ha, Then the use of pesticides continued to fall in during the last three years from 2016 to 2018, i.e. accounting for 0.81, 0.75 and 0.78, respectively. Compared with 2015, the average annual decline amounted to (-0.46) kg/ha during 2016 to 2018, i.e. the average annual decrease reached (37.1%) in comparison with 2015.

Figure (18) Use of agricultural pesticides (per hectare of agricultural land) (kg/ha) (2013-2018



Source: 4th Report of the state of environment in Yemen 2018. Ministry of Agriculture & Irrigation

#### **Evaluating the indicator:**

The significant decline in the use of agricultural pesticides is a positive indicator, as these chemical pesticides negatively affect agricultural soil and agricultural corps when used for several consecutive years in an unhealthy and unsafe manner. They lead to the elimination of the bacteria in the soil needed for fertilizers, the killing of many organisms that contribute to the analysis of organic substances, changes in soil characteristics, loss of organic components and

#### **Future Prospects:**

Agricultural pesticide use rates are expected to stabilize at these current levels in the coming years, given the stability or slight increase in agricultural area. Hence, the State should develop an appropriate agricultural policy to achieve that prospect, providing guidance and advice to farmers on the safe/proper use of agricultural pesticides and keeping away from the use of pesticides harmful to agriculture and environment in general.

consequently degradation of their fertility and productivity, resulting in an increase in desertification and loss of agricultural land for their economic value. In addition, using pesticides in large quantities and unsafe method has negative impact on environment generally, i.e. pollution of water/air, leading to harming human and animal health and degradation of agricultural soil.

# 3 GUUD TIEM. AND WELL-BEING **GOOD HEALTH**

#### 3.1.1 Maternal mortality ratio

#### <u>Definition of the Indicator:</u>

Maternal mortality rate MMR during a given period (per 100,000 live births during the same time period). It illustrates the risk of maternal death relative to the number of live births. Maternal deaths represent the annual number of female deaths from any cause related to the consequences of pregnancy during pregnancy and childbirth or within 42 days of the end of pregnancy, regardless of the duration and location of pregnancy, expressed for every 100,000 live births in a specific time period. It aims to reduce the proportion of maternal deaths in the world to less than 70 deaths per 100,000 live births.

#### <u>Trends of indicator:</u>



The high maternal mortality rate in Yemen is closely related to the quality of antenatal and delivery care and access to qualified health personnel, as well as access to family planning and reproductive health services.

According to a joint report issued by a group of international organizations, indicators of maternal mortality in Yemen for the years (2000-2005 - 2010 - 2015 - 2017) show gradual decreases, as the maternal mortality rate has been reduced from 301 deaths per 100,000 live births in 2000 to 164 deaths in 2017, though it is estimated that 1,400 women died in 2017 due to complications during pregnancy and childbirth. Among 150 women , there is a risk of maternal death throughout her life.

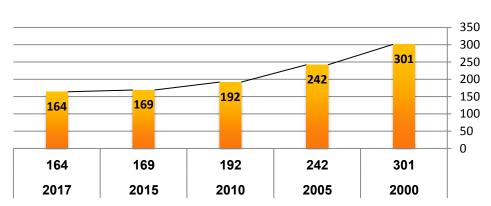


Figure (19) Maternal mortality rate 2000-2017

Source: **Trends in maternal mortality 2000 to 201**7- Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations.

#### **Evaluating the indicator:**

Despite the slight improvement in the current rates of maternal mortality, 164 deaths per 100,000 live births remains high and indicates that Yemen is not on the right path to reach the goals related to maternal health. This places Yemen among the 15 countries of the world in the high-level warning in 2017, starting from Syria 31 deaths per 100,000 live births, up to 1150 cases in southern Sudan. And there is no final figure that represents the maternal mortality rate in Yemen, it was estimated in Yemen (385) while it was estimated, for example, in Morocco 121, Djibouti 229, Sudan 311 deaths per 100,000 live births.

Maternal mortality ratio (modeled estimate, per 100,000 live births) | Data". Retrieved 06-27-2018.

#### **Future Prospects:**

Based on the rate of progress made between 2000 and 2017, it is unlikely that Yemen will achieve a reduction in maternal mortality to target of reach the the sustainable development goals of less than 70 deaths per 100,000 live births by 2030, unless there is a high quality of Emergency obstetric care and making all births take place in appropriate health facilities, and focusing on the main causes of maternal deaths: acute bleeding, high blood infections. pressure during unsafe abortion, and difficult pregnancy, deliveries.

#### 3.1.2 Proportion of births attended by skilled health personnel

#### **Definition of the Indicator:**

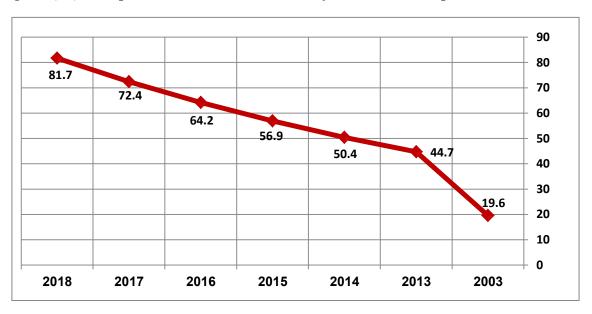
The number of births attended by skilled health professionals, expressed as a percentage of total births in a year.

#### <u>Trends of indicator:</u>

It is noticeable that the percentage of births attended by skilled professionals increased from 64.2% in 2016 to 81.7% in 2018.

This rise may not represent the current situation, in light of the war that affected the country so much, but it may be attributed to the comparison with previous years (2003, 2013, 2014 and 2015) which is the reason for the rise.

Figure (20): Proportion of births attended by skilled health personnel 2003-2018



Source: Yemeni Demographic Survey 2013 - Central Statistical Organization - and estimates prepared based on the survey results.

#### **Evaluating the indicator:**

The percentage of childbirths attended by skilled health professionals has increased during the years 2003-2018, but it is still among the lowest in the world compared to the rest of the countries.

#### **Future Prospects:**

The births rate index, under the supervision of skilled specialists, is expected to observe a significant development in the coming years, through the greater care that the government will give to the health and health services sector when the current conditions are over.

#### 3.2.1 Under- 5 mortality rate

#### **Definition of the Indicator:**

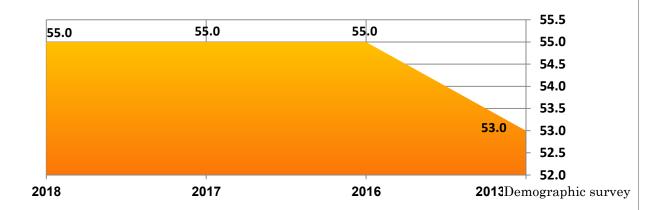
It refers to the death rate of children under the age of five per 1,000 live births. That is, the probability of death during the period between birth and under five years of age.

#### **Trends of indicator:**



The mortality rate of children under 5 years of age perceived a gradual rise during the period (2016 - 2018), as it upraised from (53.0) to 55.0) in 2018, i.e. an increase of (2%) and this upturn in the indicator rates reflects the worsening of the health situation as well as the economic crisis that our country passes by.

Figure (21): Under-5 mortality rate 2013-2018



#### Source:

- Central Statistical Organization, Demographic Survey 2013.
- World Bank Report (World Development Indicators).

#### **Evaluating the indicator:**

The mortality rate of children under five years of age is relatively high compared to other countries, in addition to economic instability as well as the crisis and war on Yemen.

#### **Future Prospects:**

The death rate of children under five years of age is likely to remain high during the next year, as a result of the crisis and the war on Yemen, the decrease in health coverage, maternity and newborn care, in addition to the lack of medical supplies and treatment.

#### 3.2.2 Neonatal mortality rate

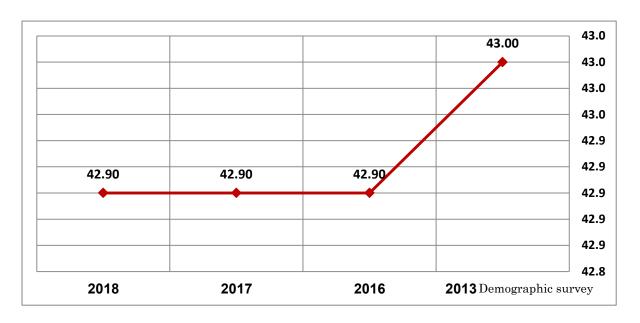
#### **Definition of the Indicator:**

It is the number of deaths during a year out of every 1000 babies born alive in that year.

#### <u>Trends of indicator:</u>

The infant mortality rate witnessed a very slight decrease, as the birth death rate was (43.0) in 2013 and declined to (42.90) in 2016-2018.

Figure (22): Neonatal mortality rate per 1000 babies 2013-2018



#### Sources:

- CSO, Demographic Survey 2013.
- World Bank Report (World Development Indicators)..

#### **Evaluating the indicator:**

It is noted that the infant mortality rate is still high compared to the rest of the countries, due to the deterioration of the health level and the lack of clean water suitable for drinking because of the infant's vulnerability to diseases caused by polluted water.

#### **Future Prospects:**

It is anticipated that the infant mortality rate will remain high during the year 2019 due to the ongoing war on Yemen.

#### 3.3.1 Number of new HIV infections per 1,000 uninfected population

#### **Definition of the Indicator:**

It refers to the number of HIV cases per 1,000 people in the uninfected population in a given year, according to age and gender. It is measured by dividing the number of HIV infections by the total population multiplied by 1,000. To calculate the infection rate with this virus, a special administrative health record is required to document and publish new infections with this virus, along with information about the person's sex, age, nationality, and the probable date at which the infection occurred, noting that there are people who are carriers of the virus, but whose infection has not been detected because they have not been examined or not seen symptoms of this disease yet. This rate differs from the percentage of carriers of this virus revealed by household surveys that include a laboratory examination of blood samples taken from respondents. The accuracy of the data on infection with this virus varies according to the nationality of the person, as it is more complete among expatriates than among citizens because undergoing a special examination for this virus is a condition for the residence of the expatriate and obtaining a work permit in most Arab countries.

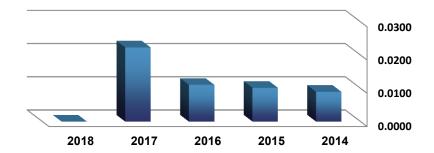
#### Trends of indicator:



According to the available data on the number of cases infected with the virus, observed which was to increase continuously annually, the number reported in 2015 compared to 2014 increased by (17%), and the percentage of increase in 2016 compared to 2015 (12%), while the percentage increased in 2017 compared to 2016 significantly and by a rate of (107%) and with a total number of (628) cases and a rate of (0.022) per 1.000 people in 2017, compared to (303) cases at a rate of (0,011) per 1,000 people in 2016.

Source: Statistics Yearbook 2017

Figure (23): Number of new HIV infections per 1,000 uninfected population 2014-2018



#### **Evaluating the indicator:**

According to the data available in the annual statistics book, which was observed, no detailed data are available for the number of cases by sex, age groups, nationality or social status and is available only by governorate, according to the data from the source authority, and therefore when comparing this indicator with Iraq, which is observed to record (0,014%) for every 10 thousand people, in 2016 compared to Yemen, which amounted to (0,010%) per 1,000 people.

Source: The Iraq Sustainable Development Report 2017.

#### **Future Prospects:**

It is expected that data on this indicator will be available from the source authorities through the obligation to register in accurate and up-to-date administrative health records documented according to (gender / age / date / nationality / marital status / type of injury or transmission) through coordination with the Ministry of Public Health And the population (the source data).

#### 3.3.2 Tuberculosis incidence per 100,000 population

#### **Definition of the Indicator:**

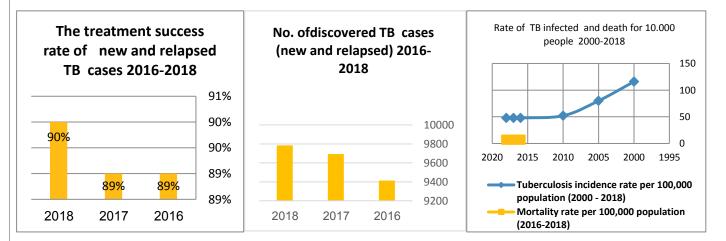
Tuberculosis incidence per 100,000 population as defined in the estimated number of new and relapsed TB cases (for all forms of tuberculosis, including cases in people living with HIV), expressed as per 100,000 population.

#### **Trends of indicator:**



Tuberculosis is one of the serious infectious diseases and it still represents one of the health, social and economic problems in Yemen .According to the annual estimates issued by the World Health Organization and the World Bank Group in Yemen, that 14,000 new cases of tuberculosis (including cases in people living with HIV) occur annually during the years (2016-2018), with an annual average incidence of 48 cases per 100.000 population. The death rate for the years (2016-2018) was 7 deaths (including HIV carriers) per 100,000 people. The number of new and relapsed cases of tuberculosis in 2016 was recorded at 9,412 cases, and the treatment success rate was 89%. In 2017, 9,693 cases were recorded, and the treatment success rate was 89%. In 2018, 9,974 cases were monitored and recorded, The treatment success rate for these cases was 90%.

Figure (24): Tuberculosis incidence per 100,000 population 2016-2018



Sources: World Health Organization 2016-2018, World Bank Tuberculosis Indicators (time series), Statistical Year Book 2016 and 2017).

#### **Evaluating the indicator:**

The annual occurrence rates for the years (2016-2018) for tuberculosis cases are still very high (48) cases per 100 thousand people, as is the high death rate (7) deaths per 100,000 people, compared to Arab countries that have wars like Iraq 42 cases of tuberculosis per 100 thousand People and death rates (2.2) deaths, Libya 40 cases of tuberculosis and death rate (6.4) deaths, Syria 19 cases of tuberculosis and death rate (26. 0) deaths per 100,000 people.

#### **Future Prospects:**

The Ministry of Health and Population seeks to reduce the annual incidence rates of tuberculosis cases and reduce death rates to 30% until 2021 compared to 2015 according to the timely strategic plan drawn up by the ministry that needs sufficient financial support from international organizations to implement this plan, given that the TB combat program in Yemen depends entirely on external support to finance its activities, the lack of a government budget due to the transfer of the central Bank and the continuing war on Yemen. In spite of this, there are determined efforts by the Ministry of Health and Population to reduce the spread of the TB epidemic in the future through the emergency plan that it set to achieve this goal of the sustainable development goals.

#### 3.3.3 Malaria incidence per 1,000 population

#### **Definition of the Indicator:**

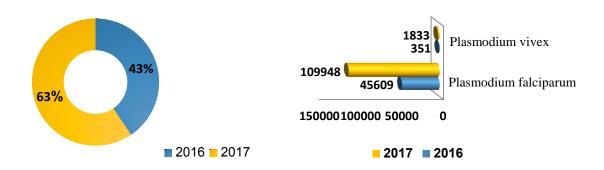
#### Malaria cases are defined as the number of new malaria cases per 1,000 people at risk each year.

#### **Trends of indicator:**



The number of malaria cases per 1,000 people in Yemen witnessed significant increase during (2016-2017), in 2016 the number of malaria cases per 1,000 people (43) cases, and in 2017 the prevalence of the disease increased dramatically, as the number of malaria cases for every 1000 people (63) cases. The most dangerous types of parasites responsible for most deaths caused by malaria, which are called (Plasmodium falciparum sickle), have caused a number of (45,609) cases in 2016, and the number of cases infected with this parasite increased in 2017 to (109948) cases, while the type of parasite called B (Plasmodium vivex envisioned active) caused (351) cases in 2016, and in 2017 the number of cases with this parasite increased to (1833) cases. The reason for the increase in the number of cases of malaria spread in Yemen is due to the continuation of the war and the collapse and destruction health facilities and the increase in the number of IDPs in the camps, the coming of thousands of refugees from the Horn of Africa countries, carrying strains of malaria, in addition to climate change, such as rainfall and changes in temperature and humidity.

Figure (25): Malaria incidence by type of parasite 2016-2017



#### Sources:

- World Malaria Report 2018 by WHO
- Statistical year book 2016 CSO.

#### **Evaluating the indicator:**

Malaria is one of the most important health problems in Yemen, where 60% of the population lives in areas where malaria is endemic. The World Health Organization has classified Yemen as a pandemic within the Afro-Equatorial group, just like the countries of the Horn of Africa where the type of falciparum malaria prevails. Recorded infections incidences and deaths exceeded 90%

#### **Future Prospects:**

It is expected that the incidence of malaria in Yemeni population will increase during the coming years as long as the war on Yemen continues and damages of the health infrastructure, and consequently, the continued endemic of malaria in Yemen will have an effect on impeding productivity and a serious negative impact on development, especially social and economic, and will also have an impact on growth. The right for the Yemeni child and his/ her ability to study.

#### 3.3.4 Hepatitis B incidence per 100,000 population

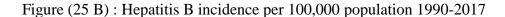
#### **Definition of the Indicator:**

It is the number of new cases of hepatitis B infection in one year per 100,000 population.

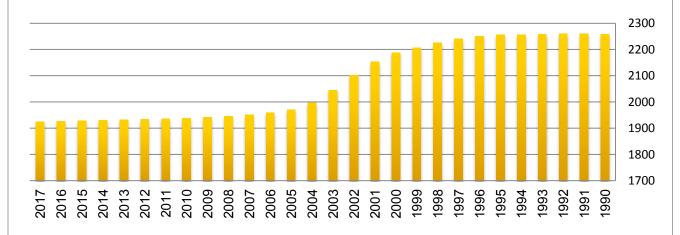
#### Trends of indicator:

The indicators show the number of cases of hepatitis B infection per 100,000 population in Yemen from 1990 to 2017 that they are still high, and constitute a serious threat to the Yemeni population, even if the number of cases is gradually decreasing between one year and another. In 1990, the number of cases of hepatitis B infection per 100 thousand of population was (2258), and the number decreased gradually in 2000 to (2187), and the number continued to decline in 2010, when it reached (1938) cases .In 2017, there was no significant improvement in the decrease of the infected cases, as the number reached (1925) cases. This is due to the deterioration of primary health care facilities and the consumption of unclean water, lack of sterilization of germs and exposure to blood transfusion in an unsafe manner or exposure to fluids from the body of a patient with hepatitis. The biggest cause of hepatitis is the use of Qat in which a toxic amount of pesticides has been

harvested by the Yemeni farmer before the time allowed for



ingestion has passed.



.Source: Data published by Global Burden of Disease Collaborative Network 1990-2017 USA.

#### **Evaluating the indicator:**

According to international reports, Yemen is among eight Arab countries with hepatitis prevalence rates reaching high levels ranging between (1925 - 5329 cases), which are Qatar, Saudi Arabia, Somalia, Sudan, South Sudan, Djibouti and Egypt. Egypt is one of the most Arab countries that suffer from hepatitis, with a rate of 5329 cases per 100,000 population. As for Tunisia, it is the lowest in the Arab countries, at 975 cases per 100,000 people.

#### **Future Prospects:**

To reach this goal in 2030, international organizations and those responsible for setting the SDGs have yet to define the specific level to reduce the number of cases of hepatitis. And expectations in Yemen confirm the continuation of high indicators in the number of cases of hepatitis, as a result of the continuation of the war and the blockade, directly and indirectly, such as the worsening of the primary health care means, water pollution and the spread of epidemic diseases, in addition to a large shortage and discrepancy in medicines for the liver, all of these factors will lead to deterioration and increase cases of this disease.

## 3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

#### **Definition of the Indicator:**

The possibility that there are people in the thirty years of age who may die before reaching the age of seventy due to cardiovascular disease, cancer, diabetes or chronic respiratory diseases, assuming that they may witness current death rates at every age and will not die from any other cause of death (such as Infections or HIV). This indicator is measured by the number of deaths due to:

Cardiovascular diseases, cancer, diabetic,

Other chronic respiratory diseases

For each type separately and by sex, according to the records of the Ministry of Health (the source authority).

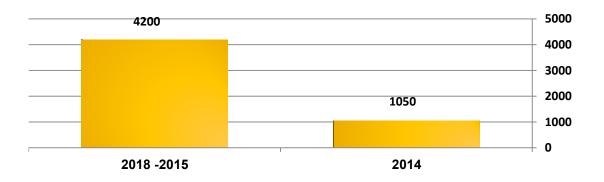
#### **Trends of indicator:**



The incidence of chronic diseases is increasing endlessly as a result of the declining health situation in Yemen due to war on Yemen since 2015. As some reports indicated that the total diseases reported in 2014 amounted to (1,176,906) cases, to reach in 2018 to the highest level, reaching (4,484,249) cases, i.e. four times more than the number due to the spread of epidemics.

These reports showed that (4200) patients died of kidney failure, cancer and diabetes as a result of the lack of medicines, medical solutions and medical care, and (197,000) people died as a result of the lack of health care, food and medicine due to the blockade imposed on Yemen, and also showed that 6 children every hour die due to different diseases.

Figure (26): Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease 2014-2018



#### **Evaluating the indicator:**

The importance of this indicator, which did not have any detailed data to be measured except for what was found according to its source, and therefore it is difficult to compare it with similar Arab countries, which are measured and calculated this indicator like Iraq which is calculated annually by the Ministry of Health (the source authority) according to gender and at the level of each type of disease, where the total number of deaths from diabetes reached (3915) cases and cancer (10551) cases during the 2016 which is considered high compared to what was calculated for the total number of deaths of those who died of kidney failure, cancer and diabetes with a total of (4,200) deaths During the period 2015 - 2018.

Source: The Iraq Sustainable Development Report 2017.

#### **Future Prospects:**

Coordination with the Ministry of Public Health and Population on providing data for this indicator by maintaining regular statistical administrative records that meet the provision of the data required to measure this indicator.

#### 3.4.2 Suicide mortality rate

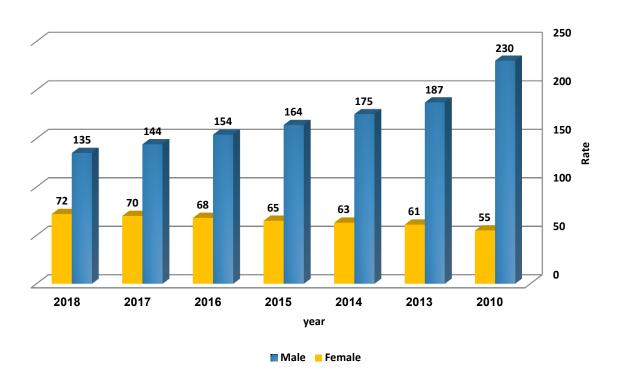
#### **Definition of the Indicator:**

It is the number of deaths due to suicide (male / female) in a given year to the total population multiplied by 100,000.

#### Trends of indicator:

It is clear from the indicator on male suicide mortality that there is a slight decrease in this indicator among males, as it decreased from 1.0% in 2010 to 0.5% in 2018, while the female rate remained constant for all years until 2018.

Figure (27): Suicide mortality rate by sex 2010-2018



#### **Evaluating the indicator:**

This indicator viewed a limited decrease in respect to males while it remained constant for all years for females and therefore it is necessary to work to reduce the suicide mortality rate for males and females through identifying the reasons and working to address them.

#### **Future Prospects:**.

Male and female suicide mortality rates are projected to decrease to lower levels depending on the improvement of economic and social conditions after the end of the current political conditions and the war in the country.

#### 3.6.1 Death rate due to road traffic injuries

#### **Definition of the Indicator:**

Number of deaths, by gender, who died due to traffic accidents from the total population.

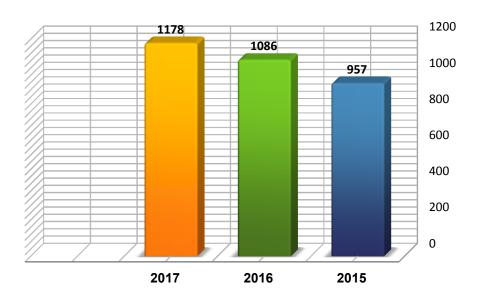
#### **Trends of indicator:**



Death rates increased due to traffic accidents, and the number of deaths raised for females other than females during the period 2015-2017, as it increased from 957 deaths in 2015 to 1086 in 2016 and to 1178 in 2017 (of whom 1,017 males and 161 females were ). This rise is due to the lack of adherence to the traffic principles.

Source: CSO -statistical yearbook 2017.

Figure (28): Death rate due to road traffic injuries 2015-2017



#### **Evaluating the indicator:**

It is clear that the number of deaths resulting from traffic accidents in Yemen remains of medium proportions compared to the Arab countries.

#### **Future Prospects:**

It is expected that the number of traffic accident victims of both sexes will continue to increase in the coming years due to the reckless driving and failure to comply with traffic laws and guidelines as well as allowing children to drive. In addition, most of the roads have worsened and have no regular maintenance

# 3.7.1 Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods

#### **Definition of the Indicator:**

The percentage of women of childbearing age (15-49 years) who wish not to have children or not to have children again, or to postpone childbearing, who are currently using modern method.

The percentage of women of childbearing age (15-49 years) who use at least one modern contraceptive method today.

Total demand for family planning, total contraceptive prevalence, and unmet need for family planning.

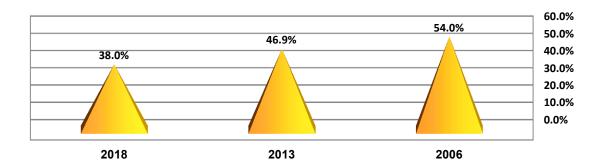
The estimates are in respect to married women.

#### **Trends of indicator:**



The proportion of women of childbearing age (15-49 years) who have determined their need to organize a family in modern methods is gradually decreasing during (2006-2013-2018), where the percentage in 2006 (54%) and decreased in 2013 to (46.9%). According to UNICEF estimates (2013-2018), the percentage decreased to 38%. This reduction may have many reasons, such as the husband, family, or community's refusal to do so, or incorrect perceptions of women about the health risks in using modern methods. Because of the ongoing war, the blockade upon Yemen, and the destruction of health facilities, this has led to the inability of women to go to these facilities to obtain family planning services. This warns of the dangers of overpopulation in Yemen.

Figure (29): Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods 2006-2018



#### Sources:

- 1- Multi- Indicators Survey (MICS) 2006 Ministry of Health and Population Yemen, UNICEF.
- 2- National Health Demographic Survey (DHS) 2013 (Ministry of Health and Population, CSO Yemen), Arab Program for Family Health in Cairo.
- 3 The World Report "The State of the World's Children 2019, UNICEF.

#### **Evaluating the indicator:**

Along with the countries (Sudan, Libya and the Sultanate of Oman), Yemen is among the countries with the lowest rates of women of childbearing age (15-49 years) who have identified their need to organize family in modern ways at the level of Arab countries, compared to 2018 ,the rate in Sudan reached 30%, in Libya 24%, and in the Sultanate of Oman 40%.

#### **Future Prospects:**

It is expected that Yemen will witness a gradual decrease in the rates of women in childbearing age (15-49 years) who have determined their need for family planning in modern ways. Health facilities are still destroyed in most areas of Yemen and it is difficult to deliver health supplies and means to many of them, whether from the state or from international organizations, and this means to prevent women in those areas accessing to such facilities .

# 3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older

#### **Definition of the Indicator:**

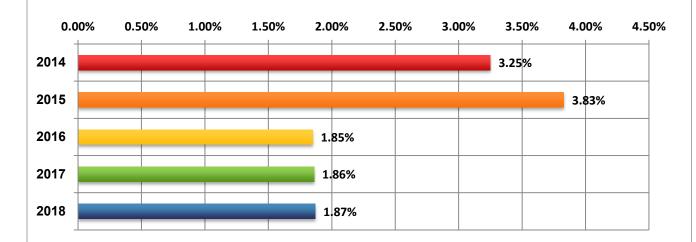
The proportion of smokers, children aged 15 years, of the total population of the same age, and it reflects the psychological pressure of this segment of the population.

#### **Trends of indicator:**



During the 2016-2018 period, it witnessed a slight increase due to the conditions that Yemen experienced during that period as a result of the war on Yemen, the growing phenomenon of school dropout and the loss of most families to their sources of income, which forced most of the children to go to smoke. As the percentage of smokers, at the age of 15 years to the total population at the same age ,increased from 1.85% in 2016 to 1.86 and 1.87 during the years 2017-2018, respectively.

Figure (30): Proportion of tobacco use among persons aged 15 years to the total of population 2014-2018



#### **Evaluating the indicator:**

Although the rate of smokers increased slightly, it is an hint of the tension prevalent among young people of this age, as a result of the high rate of unemployment and the widespread phenomenon of dropout from education and child labor. In comparison with Arab countries, this percentage remains small

#### **Future Prospects:**

It is anticipated that this percentage will continue to grow in the persistence of the war on Yemen, and it is necessary to stop this phenomenon by finding the necessary treatments.

# 3.b.1 Proportion of the target population covered by all vaccines included in their national program

#### **Definition of the Indicator:**

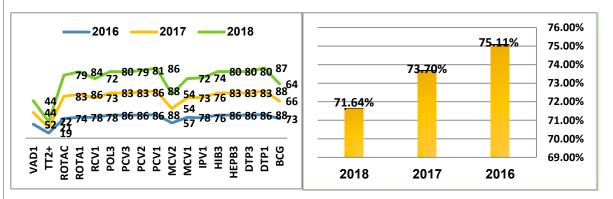
MMRV mumps vaccine coverage, tetanus and pertussis vaccine (third dose), measles vaccine coverage (second dose), pneumococcal vaccine coverage (last dose in the schedule), HPV vaccine coverage (last dose in the schedule))

#### **Trends of indicator:**



The coverage rates for childhood vaccines in Yemen are an indication of the quality of care provided for children because of their great importance and effectiveness in protecting against infectious diseases that may lead to serious diseases and complications that may reach the level of disability, and through the indicators for coverage of vaccines prepared by the W H O in Yemen for the years (2016-2018), it showed that in 2016 all vaccines for children were covered by 75.11% (this percentage is the average ratio for all types of vaccines given to children), and in 2017, the coverage rate for children fell to 73.7%, and the rate coverage of vaccines for children continued its decline in 2018 to reach 71.6%. The low rates of vaccination coverage in Yemen have negatively affected the quality of health care provided to children and the high infant mortality rate (per 1,000 live births) in Yemen, reaching 43% in 2018.

Figure (31): Proportion of target population covered by all vaccines included in their national program 2016-2018



Source: World Health Organization data in Yemen for the years (2016-2018), the data was updated on July 15, 2019, by (WHO)...

#### **Evaluating the indicator:**

Vaccines coverage is considered as a basic component of preventive medicine measures taken in society to the extent that it was adopted as one of the indicators in achieving a coverage rate of not less than 90% with vaccines to assess the health status in the world by WHO and its preservation in children. Comparing the indicators for vaccination coverage at the global level, we find that Yemen (71%) and Syria (57%) are among the countries where the indicators for vaccination coverage were very low and these two countries did not achieve the optimum percentage set by the WHO. Perhaps the reasons for the low coverage rates for vaccines in Yemen, mainly due to the continuing war on the Yemeni population, the destruction of health facilities and the difficulty of vaccines reaching all areas of Yemen.

#### **Future Prospects:**

There are challenges that will continue to face vaccination coverage rates for Yemeni children because of the social, economic and scientific impacts of vaccines, and these challenges will increase in light of the ongoing war and blockade on Yemen, and vaccination coverage rates for children will continue to decline in the coming years .However, efforts must be intensified to support and promote health awareness for mothers and parents of children to place vaccination of their children in the priorities of their work. Vaccines are the cornerstone of efforts to improve health at the level of Yemen and the world.

#### 3.c.1 Health worker density and distribution

#### **Definition of the Indicator:**

This indicator refers to the number of health professionals (doctors, dentists, pharmacists, nurses) per 1000 people, attributed to the total population according to the administrative divisions. This indicator is measured to identify differences among individuals regarding access to health care.

(Health worker / 1000 people)

#### **Trends of indicator:**



The figure below shows, in general, that the three types of health specialists witnessed a decline since 2014 to 2017, with the exception of the number of patients per 1,000 people for the year 2017. The index rose from 2016 in the ratio of (0,47%) in 2016 to (0,49) %) In 2017, which is evident from the low average density of health professionals according to their distribution for every 1,000 people in Yemen.

Source: Statistics Yearbook 2017.

Figure (32): Proportion of Health worker density (doctors, dentists, nurses) (per 1000 people) 2014-2017



#### **Evaluating the indicator:**

When comparing this indicator in Yemen with some Arab countries such as (Djibouti, Sudan, Mauritania, Syria), it was noted that Yemen is better than both Djibouti and Mauritania for 2015 (available data), where the value of the indicator for them respectively reached the number of doctors per 100 thousand people (21 and 10) compared to Yemen, which is (30), while the value of the index for the same year in Sudan was (42) per 100 thousand people better than Yemen, and when comparing Yemen to Syria, the value of the index for Syria in 2015 (133) per 100 thousand people. When comparing the number of nurses per 100 thousand people to the above-mentioned Arab countries in 2015, the indicator value for both (Djibouti 51 and Mauritania 70) decreased compared to Yemen (73), while Sudan and Syria respectively (99 and 198).

Source: Statistical Appendices - The Consolidated Arab Report - Indicators for Arab Countries.

#### **Future Prospects:**

The concerned authorities in the Ministry of Health and with the support of international organizations should work to increase funding in the health sector and employ and qualify the workforce in this sector and continue to develop and train them, in order to provide primary and other health services with the quality and time needed, and then provide data and information that works to measure this indicator for the goal Associated with the sustainable development goals.

#### Life expectancy at birth (life expectancy at birth)

#### **Definition of the Indicator:**

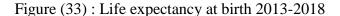
The number of years a child is expected to live from birth in the event that the prevailing death factors persist at the time of their birth as they are throughout his life, and this indicator is the outcome of the overall progress in various health, food, social, economic and cultural fields)

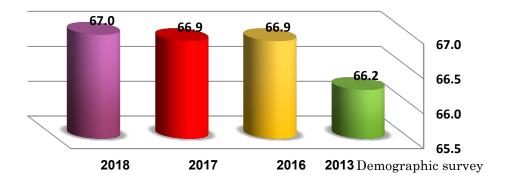
It refers to the number of years expected to survive at birth for males and females.

#### **Trends of indicator:**



It is noted that the life expectancy at birth has increased from (66.2) years in 2013 to (66.9) in 2016-2017 and the index has continued to rise according to 2018 estimates to (67.0) and the indicator is likely to rise according to expectations until it reaches more than (68) in 2019.





#### Sources:

- Demographic Survey 2013 . CSO.
- World Bank Report (World Development Indicators)

#### **Evaluating the indicator:**

Yemen is considered one of the low-rate countries, compared to other Arab countries such as Kuwait, which has an average rate of 76 years, in anticipating life at birth, despite the fact that the index is continuously rising more than the previous period, where the index reached (66.9) in 2017 and is likely to increase to (67.3) in 2019 according to the World Development Indicators Report.

#### **Future Prospects:**

The index is likely to reach (67.3) in 2019.

#### **Total population**

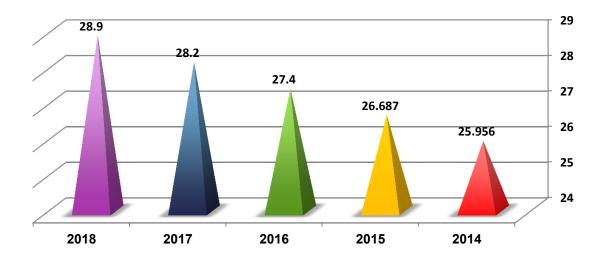
#### **Definition of the Indicator:**

Population: It is the total number of individuals (males and females) who are present at a specific time and place and are linked by social relations.

#### **Trends of indicator :**

This indicator seen an increase during the period 2016-2018, as the total population in the middle of 2016 was (27.4) million, while in the middle of 2017 ,reached (28.2) million people, and in the middle of 2018, reached (28.9) million people, according to Population projections in the normal position.

Figure (34): Total population 2014-2018 (Million people)



#### Sources:

- 2004 G.census CSO
- P0pulation projections. CSO

#### **Evaluating the indicator:**

It was noticed that the population of Yemen increased from (27.4) million people in 2016 to about (28.9) million people in 2018, i.e. a population increase of (1.5) million people.

#### **Future Prospects:**

According to the results of the population projections, the population is expected to continue to rise, but slightly and less than before (in the normal situation).

#### **Population growth rate**

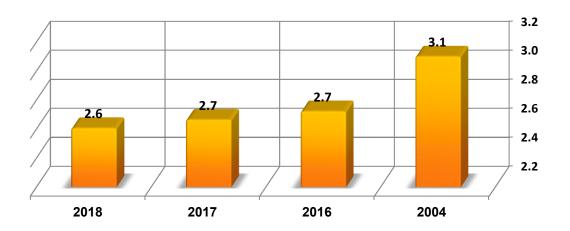
#### **Definition of the Indicator:**

The increase or decrease of the population in a period of time, expressed as a percentage of the population at the end of the period.

#### **Trends of indicator:**

It was noticed that the population growth rate decreased during the period 2016-2018, as it decreased in 2016 and 2017 to (2.7) and it decreased to (2.6) in 2018, while it was (3.1) in 2004

Figure (35): Population growth rate 2004-2018



Sources:

- 2004 G. Census CSO
- Population projections. CSO

#### **Evaluating the indicator:**

Despite the low rate of population growth index during the period 2016-2018, it is still far from population growth rates in the least developed countries.

#### **Future Prospects:**

Yemen is expected to witness a slight reduction in the rate of growth in the coming years due to the conditions in the country.

#### **Total fertility rate**

#### **Definition of the Indicator:**

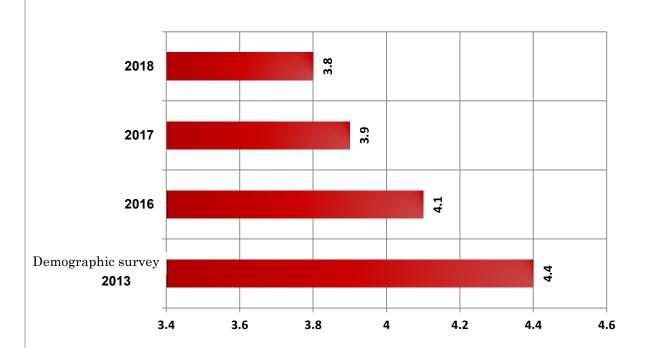
# It refers to the average number of children a woman can have during her normal reproductive period, if her reproductive behavior throughout her life matches the fertility rates for the age of a specific year. Calculation of this indicator requires the absence of deaths.

#### **Trends of indicator:**



The total fertility rate index for Yemen beheld a gradual decline during the period (2016-2018), as it decreased from (4.4) live births for one woman of childbearing age in 2013, to (4.1) in 2016. This is due to the increased awareness and knowledge of family planning.





Source: Population projections- CSO.

#### **Evaluating the indicator:**

The total fertility rate for every woman in Yemen (3.8) is relatively high compared to other countries in the world.

#### **Future Prospects:**

The indicator is anticipated to continue to decline to (3.7) in 2019 due to the influence of intermediate determinants such as the use of family planning methods, the high educational level among females that leads to a delay in the age of marriage, in addition to social, economic and cultural factors that have enhanced the reproductive behavior of women In Yemen.

#### Proportion of population covered by primary health care

#### **Definition of the Indicator:**

The percentage of the population in both urban and rural areas who are expected to obtain medical treatment for all diseases and injuries attributable to the total population.

Health care is also measured by the percentage of the population enable to access to primary health care facilities and the vaccination rate for infectious diseases in children.

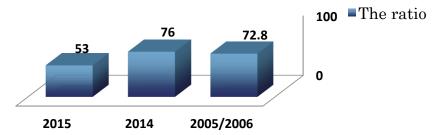
#### **Trends of indicator:**



The index increased by (4.4%) in 2014 compared to 2005/2006 from (72.8%) in the 2005/2006 to (76%) in 2014, according to what was calculated by the World Bank experts on the results of the household budget survey in 2014, while the percentage decreased to (53%) in 2015. According to the reports of international organizations, which showed that only 50% of health facilities work with their limited capabilities and stop the salaries of health workers during the period (2015 - 2018), and also showed that (16,4) million people in Yemen need help to ensure that they obtain adequate health care, of them (9,3) million people are in urgent need of minimal health care due to illness or injury .When measuring this indicator in light of the conditions that the country is going through since the beginning of the war in the beginning of 2015, which led to a shortage in providing primary health services for several reasons, the most important of which is the destruction of many health facilities and the acute shortage of medicines and medical supplies, and therefore the indicator has reduced significantly in 2015.

Sources: Statistics Yearbook 2017, World Bank expert calculations using the 2005/2006 HH Budget Survey and the 2014 HH Budget Survey.

Figure (37): Proportion of population covered by primary health 2005/2006-2015.



#### **Evaluating the indicator:**

The percentage of the population covered by primary health care in Yemen is better than some Arab countries such as (Sudan and Mauritania) in 2015, which reached (24% and 27%) respectively, while the situation in Djibouti is better than Yemen for the same year with a rate of (61%). In comparison with one of the Arab countries that suffers of war like Syria, with percentage (96%) in 2015, despite the continuation of the war for years.

Source: - Statistical Annexes - The Consolidated Arab Report - Indicators for Arab Countries.

#### **Future Prospects:**

A Comprehensive health care with good quality and available for all, through achieving full coverage of all population groups by setting the necessary and appropriate treatments and solutions to cover expenses in order to ensure the provision of the service in which statistical data are to be recorded and obtained in a timely manner for measurement purposes.



### 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex

#### **Definition of the Indicator:**

Defined as a percentage of children of the specified age group who participate in one or more in the structured learning program.

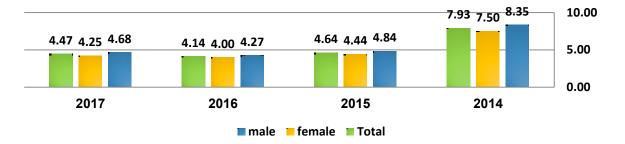
$$ROL0t1, AG(a-1) = \frac{E0t1, AG(a-1)}{SAPAG(a-1)}$$

#### **Trends of indicator:**



Early childhood education in Yemen is extremely beneficial for improving knowledge development, academic achievement, and human capital development in addition to the expected economic and social gains in the long term. During the years from 2014 to 2017, the indicators of the participation rate in organized education for children at the age of 5 years witnessed successive declines since the war on Yemen in early 2015, the destruction of large numbers of schools and the descent of the economic, social and living conditions of the Yemeni population .In 2014, the number of male students at the age of 5 years enrolled in formal education was (32,939), by (8.35%), and female (28,039), by (7.50%), and with total of (7.9%), while in 2015, the number of male students decreased to (19,310) with a rate of (4.84%) and females to (16,910) by (4.44%) and with total of (4.6%), while in 2016, the number of male reduced to (17,424) by (4.27%) and females to (15,558) by (4%), with total of (4.1%), and in 2017, the number of males reached (19,449) by (4.68%), and females touched (16,871) by (4.25%), with total of (4.4%)

Figure (38) Participation rate in organized learning (one year before the official primary entry age) 2014-2017



Sources: 1- A time series for children enrolled in early education (one year before the primary school age) - Ministry of Education - Statistics Department - Yemen , 2- Population projections (2004-2025) Population of children aged 5 years - Central Statistical Organization - Yemen.

#### **Evaluating the indicator:**

The indicators for the participation rate of children in organized education for one year before basic education in Yemen are still very low beside Somalia 2%, Iraq 2%, South Sudan 6%, and Syria 8%, while other countries have witnessed high rates such as Lebanon with 62%, Egypt 47%, Tunisia 44% and Qatar 41%. This variance among the Arab countries is due to the regulations and legislations that differ from one country to another in the interest of early childhood development.

Source: World Report. The State of the World's Children 2019 By UNICEF.

#### **Future Prospects:**

Pre-primary education in Yemen is non-compulsory education, however the Ministry of Education has paid more attention to pre-primary education and prepared a national strategy for early childhood development (2013-2017) with a small number of kindergartens that are mainly distributed in urban areas. Its presence in rural areas, where the proportion of the population constitutes more than 70% of the population of Yemen, but due to the conditions that Yemen has been going through since the beginning of the war on Yemen in early 2015 and the persistent destruction of educational facilities as well as the economic, financial and living blockade of its citizens, it is not expected that Yemen will achieve the implementation the strategy of the access of education for all children (one year before the primary) and no progress will be made in the rate of participation in organized education one year before the basic education as SDGs indicators.

## 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

## **Definition of the Indicator:**

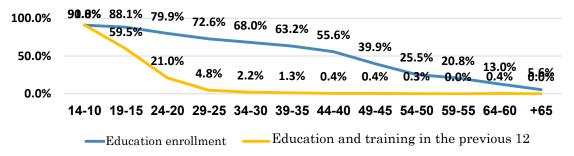
It is the rate of youth and adults of a certain age (e.g.15-24 years, 25-64 years, etc.) participating in formal or informal education or training at a specific time period (e.g. last 12 months).

## Trends of indicator:

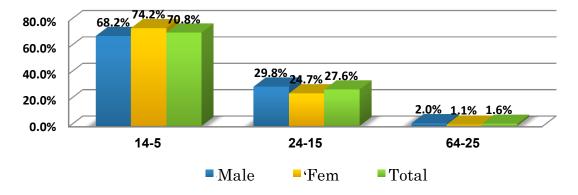
•••

Due to the conditions in Yemen, there is no doubt that there is a significant rise in the percentage of young people (aged 15-24 years) and are not in education, work nor training, as it reached more than 70% among females and more than 60% among males in the 5-14 age group, and more than 20% in the 15-24 age group.

Figure (39): Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months



Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months by sex.



## **Evaluating the indicator:**

Yemen suffers from a high rate of youth in the age group (15-24) who are not in education, work nor training compared to other Arab countries. For example, in Palestine the percentage reached 32.3%, in Egypt 34.4% and in Mauritania 39.5% while in Yemen, it is 44.8%, which illustrates the extent of the problem that afflicts Yemen.

## **Future Prospects:**

Certainly, the scale of this phenomenon has increased in intensity, especially with the rise in school dropout, which has reached about 3 million students, moreover, most factories and private companies in Yemen have stopped their functions due to the war.

## 4.7.1.a Average number of students per class

## **Definition of the Indicator:**

It is the average number of students per studying (class).semester

It is calculated by dividing the total number of students enrolled in the school year by the total number of learning classes.

Average number of students per semester (class) for the year (Q) =

Total number of students enrolled in the academic year of year (Q)

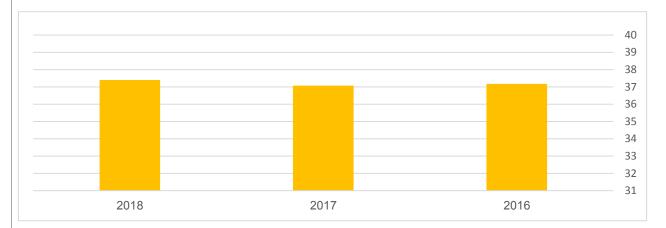
Total number of academic classes for the year (Q)

## **Trends of indicator:**



Through the figure below, we note the steadiness in the average number of students in the schooling class during 2016 to 2018, where the average during the three years was 37 students per the academic (class) in the basic and secondary education stages.

Figure (40): Average number of students per class in the basic and secondary education stages 2016-2018



## **Evaluating the indicator:**

This indicator reflects the environment of education in terms of the density of students in the studying division (class), which affects the quality of education positively whenever this average decreases and negatively whenever the average rises abnormally. However, there are other factors that also have an effective impact on the quality of education, which must be taken into consideration when assessing the quality of education.

## Sources:

- Statistics Year Book (Education and Population Projections chapters) :
- Human Development Manuals and its Indicators Report, Statistical Update . 2018.
- (Education in Yemen) report, The Ministry of Education, March 2019.

## **Future Prospects:**

Future expectations remain subject to assumptions either as the continuation of the war and its resulting negative impact on the educational situation, and positively on the assumption that the war will cease and to improve the conditions of the educational process, but this optimism must be taken into account other important factors, as the war stopped may result in the return of many students who have dropped out from education due to war, and in light of the constancy of the current educational facilities, it will lead to an increase in the average number of students in the class. Thus, the forecast takes several other indicators that affect this targeted indicator.

## Adult literacy rate (15 years and above)

## **Definition of the Indicator:**

It refers to the rate of the population aged 15 years and over who is literate, expressed as a percentage of the total population aged 15 years and over. A person is considered literate when he is able to read, write and understand a simple and short text that deals with his daily life.

How to calculate the indicator:

Adult literacy rate for ages 15 and above=

Literacy population aged 15 and over x 100

Total population aged 15 and over

Where: [LIT] \_ ( [15] ^ +) ^ t adult reading rate (15 years and over) in t.

 $L_{(15)}^{h}$  +) ^ t literacy population (ages 15 and above) in t.

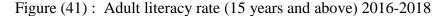
 $P_{(15)}^{+}$  ^ +) ^ t Adult population (15+) in t

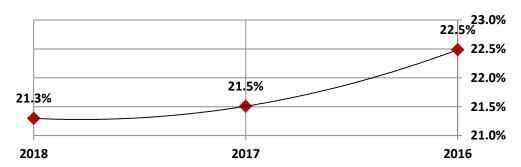
## **Trends of indicator:**



The literacy rate for people aged 15 years and over has perceived relatively minor changes, from 22.5% in 2016 to 21.5% in 2017, and then 21.3% in 2018.

Certainly, the reasons for the decline of this indicator are the impact of illiteracy eradication programs on the war and economic conditions, which led to a slowdown, reduction and discontinuation of literacy programs, as this influence has affected the reality of education in general.





## **Evaluating the indicator:**

It indicates the effectiveness of primary education and literacy programs that enable a rate (percentage) of population to acquire the ability to use writing and reading skills in their daily lives and to continue education. Here, it explains the low rate of adults who have the ability to write and read. It is also considered one of the lowest rates globally, as it is classified as a group of countries with low human development, we fall even below the list of these countries alongside Chad, which recorded a rate of 22.3 and almost seven points higher than Niger, which recorded a rate of 15.5%.

## Sources:

- Statistics Year Book (Education chapter Population Projections chapter) ,2017.
- (Education in Yemen) report , The Ministry of Education , March 2019.
- Human Development Manuals and its Indicators Report, Statistical Update for 2018.
- Results of the Household budget survey (education chapter) 2014.

## **Future Prospects:**

Future expectations depend on changing the factors affecting this indicator, and since we are going through unusual circumstances represented in the reality of war and the blockade, the expectations for the near future may see a slight positive change upon the assumption that the war will stop and the siege will be lifted and illiteracy eradication programs will return to their previous nature and education in general to its previous activity.

## **Enrollment ratio in university education**

## **Definition of the Indicator:**

It is the group of population enrolled in university education regardless of their age group, expressed as a percentage of the total population who are of enrollment age at this stage (19 to 24).

University enrollment ratio =Total enrollment in university education (without specifying age) x 100

Total population at university enrollment age (19-24).

 $GER_{h}(h) ^t = (E_h ^t) / (P_(h_a) ^t) x 100$ 

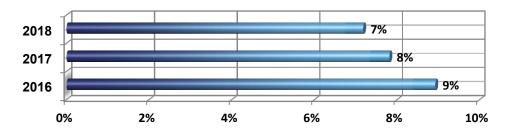
Where : GER\_ (h)  $^{\prime}$  t enrollment in tertiary education (h) in year (t).E\_h  $^{\prime}$  t, the total number of enrolled in tertiary education (h) in year (t).P\_ (h\_a)  $^{\prime}$  t, the total population of age group a (19-24) who are of enrollment age (h) in year (t)

## **Trends of indicator:**



Like other enrollment indicators in the primary and secondary stages, it witnessed a consecutive decline in a remarkable way from 2016 to 2018, as the proportion of those enrolled in 2016 reached (9%) and recorded a decrease in 2017 to (8%), and the decline process continued to (7%) in 2018.

Figure (42): Enrollment ratio in university education 2016-2018



## **Evaluating the indicator:**

The impacts of low financial incomes for households ,students' dropping out of university education in order to search for work to help their families , their inability to bear the costs of study, and the damage of some colleges as a result of the bombing due to the war was clearly reflected in the decline in enrollment rates in university education.

On the other hand, Yemen ranks, according to the levels of this indicator, within the scope of countries with low human development or less developed in the field of university education. Despite of this, we come in a relatively better level with an average rate of 8% for those enrolled in university education from Burkina Faso which recorded an average of 6% in Mali and Burundi, with an average enrollment rate in university education of 5%.

## Sources:

- Statistics Year Book (Education and  $\,$  of Population Projections chapters) , 2017.

Human Development Manuals and its Indicators Report, Statistical Update for 2018.

- (Education in Yemen) report , The Ministry of Education , March 2019.

## **Future Prospects:**

Future expectations remain positive for the halt of the war, the lifting of the blockade, and a negative for its continuation. Based on the above considerations (the continuation or the cessation of war), expectation has two aspects:

First one, which is the continuation of the war :in this case, the rate of enrollment in university education will witness a nonstop weakening due to the negative effects of the war on the household sector (low incomes - displacement and instability students' dropout to search for sources of income education facilities are damaged - insecurity in the areas of confrontations ... etc.) .Second one is stopping war, aggression, and lifting the blockade. According to that, the possible expectations are that university enrollment ratios will rise, but with a gradual increase based on factors of the rapidity of intervention to improve household incomes with the payment of salaries, the coming back of government spending on university education naturally and the repair of damaged university education facilities.

## Enrollment ratio in primary stage

## **Definition of the Indicator:**

It is the ratio of the total population enrolled in basic education, which is calculated as a rate of the total population at the enrollment age at this stage (from 6 to 14 years).

Primary enrollment ratio =

Total enrollment in basic education (without identifying age) x 100

Total population at primary school enrollment age (6-14).

$$GER_{-}(b) ^t = (E_b ^t) / (P_(b_a) ^t) x 100$$

Where :GER\_ (b) ^ t enrollment in basic education (b) in year (t).

E b ^ t, the total number of enrolled in basic education (b) in year (t).

P\_ (b\_a) ^ t is the total population of the age group a (6--14) who is of primary school age (b) in year (t).

## **Trends of indicator:**



It witnessed a consecutive decline in the period from 2016 to 2018.as the rate of those enrolled in 2016 reached (86%), while this percentage decreased in 2017 to (73%), and the decline process continued to reach (67%) in 2018.

Figure (43) Enrollment ratio in primary stage 2016-2018



## **Evaluating the indicator:**

This noticeable fall in the ratio of those enrolled in basic education is mainly due to the direct impact of the war and the blockade on the educational process in Yemen, where many educational facilities were subjected to beating and bombing, in which the affected institutions reached 3526 facilities that totally and partially damaged , closed or inhabited by refugees caused 1,879,852 students and the low income for the family , the absence of teachers for not receiving their salaries doubled the students' dropout from basic education, and this clearly cause the successive decline of this indicator.

.On the other hand, Yemen ranks according to the levels of this indicator within the scope of countries with low human development in the area of education. Yemen is a relatively better level than Eritrea, which recorded an average of 54%, and is close to Niger with an average of 74% and Mali with an average of 77%.

## -Sources:

- -Statistics Year Book (Education and Population Projections chapters), 2017.
- Human Development Manuals and its Indicators Report, Statistical Update for 2018.
- (Education in Yemen) report , The Ministry of Education , March 2019.

## **Future Prospects:**

Future expectations remain positive for the cessation of the war, the lifting of the blockade, and a negative for its continuation. In case that it is stopped, the recovery and the rise of this indicator will be relatively slow due to the relatively long period of time that is required to return the previous situation from rebuilding what was destroyed and repairing what was damaged and the return of incomes and salaries and appropriate government spending on the education sector.

## **Enrollment ratio in secondary education**

## **Definition of the Indicator:**

It is the ratio of the total population enrolled in secondary education, which is calculated as a percentage of the total population of school-going age (from 15 to 18 years).

Secondary education enrollment = Total enrollment in secondary education (without identifying age) x 100

Total population at secondary school age (15-18).

$$GER_{s}(s) ^t = (E_{s} ^t) / (P_{sa} ^t) ^t$$

Where:

GER\_ (s) ^ t enrollment in secondary education (s) per year (t).

E\_s ^ t total number of enrolled in secondary education (s) in year (t).

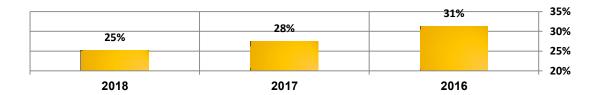
P\_ (s\_a) ^ t total population of the ages group a (15-18) who are of secondary school age (s) in year (t)

## **Trends of indicator:**



This indicator witnessed a consecutive decline in the period from 2016 to 2018, since the rate of those enrolled in 2016 reached (31%) and recorded a decrease in 2017 (28%) and the decline process continued to (25%) in 2018.

Figure (44) Enrollment ratio in secondary education 2016-2018



## **Evaluating the indicator:**

This striking fall in the ratio of those enrolled in basic education is mainly due to the direct impact of the war and the blockade on the educational process in Yemen, where many educational facilities were subjected to beating and bombing, in which the affected institutions reached 3526 facilities that totally and partially damaged, closed or inhabited by refugees caused 1,879,852 students and the low income for the family, the absence of teachers for not receiving their salaries doubled the students' dropout from basic education, and this clearly cause the successive decline of this indicator. On the other hand, Yemen ranks according to the levels of this indicator within the scope of countries with low human development in the area of education. Despite this, Yemen is a relatively better level, with an average rate of 28%, compared to Chad which recorded an average rate of 23%, and to South Sudan and Niger.

## Sources:

- Statistics Year Book ( Education and Population Projections chapters) , 2017.
  - Human Development Manuals and its Indicators Report, Statistical Update for 2018.
  - (Education in Yemen) report, The Ministry of Education, March 2019.

## **Future Prospects:**

Future expectations remain positive for the cessation of the war, the lifting of the blockade, and a negative for its continuation. In case that it is stopped, the recovery and the rise of this indicator will be relatively slow due to the relatively long period of time that is required to return the previous situation from rebuilding what was destroyed and repairing what was damaged and the return of incomes and salaries and appropriate government spending on the education sector.

## Proportion of adult population with secondary education

## **Definition of the Indicator:**

It refers to the population in the age group of 25 years or more who obtained a high school diploma (even if they did not complete it), attributed to the total population in the same age group multiplied by 100.

How to calculate the indicator:

The percentage of the population aged 25 and above who have a secondary school

Population with a secondary school from the age of 25 and over x 100 Total population aged 25 and over

Where : [LIT] \_ ( [25] ^ +) ^ t Proportion of population aged 25 and over with secondary education in year t.

L \_ (  $[\![25]\!]$  ^ +) ^ t Population with secondary education (ages 25 and older) in t.

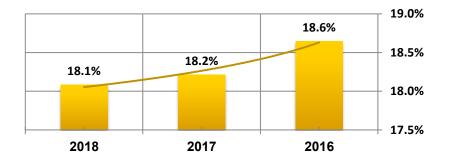
 $P_{([25])}^{(1)}$  +) ^ t, total population over age 25 and over in t.

## Trends of indicator:



It recorded a slight continuous decline during the years 2016-2018 as it recorded (18.6%) in 2016, and decreased in 2017 to (18.2%), and to (18.1%) in 2018.

Figure (45) Proportion of adult population with secondary education 2016-2018



## **Evaluating the indicator:**

Although it seen a slight decrease, it reflects the state of the abnormal conditions that Yemen is going through and the effects of these conditions on the level of education of the population in this group. On the other hand, this level places Yemen in the sort of countries with low human development, with a level lower than Mozambique, which recorded 19.3%, and higher than both Mali, which amounted to 13.1% and Burundi, with 9.3%.

## Sources:

- Statistics Year Book (  $Education\ \ and\ \ Population\ Projections\ chapters)$  , 2017.
- Human Development Manuals and its Indicators Report, Statistical Update for 2018.
- (Education in Yemen) report , The Ministry of Education , March 2019.
- Results of the household budget survey (education chapter) 2014

## **Future Prospects:**

This indicator is impressively influenced by changes at the long time level, and since we live in unusual circumstances (war and siege), it is more likely that the negative effects of these factors will be obvious in the future, when the generations that are in secondary education levels currently reach the age of 25 years.



## 5.3.1 Proportion of women aged 20-24 years who were married before age 15 and before age18

## **Definition of the Indicator:**

The percentage of women between the ages of 20 and 24 who got married before reaching the age of fifteen and before reaching the age of 18.

The equation:

Number of women aged between 20 and 24, who married 15 years old (or before the age of 18)

Total number of women between 20 and 24 years old 100

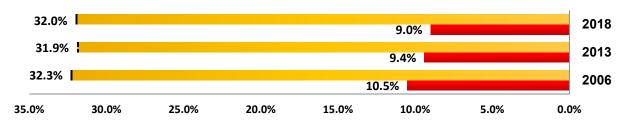
## Trends of indicator:



The phenomenon of early marriage for girls before they reach the age of 15 and before the age of 18 years is one of the social phenomena prevalent in Yemen as data available through surveys and studies for the years (2006-2013 - 2018) indicates that the rates of early marriage for girls are still high, in 2006, (10.5%) of women between the ages of 20 and 24 married before reaching the age of 15, and (32.3%) got married before they reached the age of 18. These percentages decreased slightly in the year 2013, as it reached (9.4%) for women who married before reaching the age of 15, and by (31.9%) for women who married before reaching the age of 18. In 2018, UNICEF produced estimates for this group of women through the report issued in 2019, where (9%) were married before reaching the age of 15, and (32%) got married before the age of 18.

The reason for these high rates is due to the economic and social conditions that Yemeni families are going through as a result of the ongoing war on Yemen, which also led to the displacement of large numbers of families in addition to the increasing rates of poverty and difficult living conditions that prompted parents to marry their daughters, and the high rate of unemployment. Customs and traditions in society play a big role in marrying girls in order to preserve integrity and fear of spinsterhood.

Figure (46): Proportion of women aged 20-24 years who were married before age 15 and before age of 18 - 2006-2018



 $Sources: 1- Multi- Indicators \ Cluster \ Survey \ (MICS) \ 2006 - Ministry \ of \ Health \ and \ Population - UNICEF, \ Yemen \ .$ 

 $2- The \ National \ Demographic \ Health \ Survey (DHS) \ , 2013 - (Ministry of Health \ and \ Population, \ CSO - Yemen), the \ Arab \ Program \ for \ Family \ Health \ , \ Cairo \ , \ Cairo \ , \ CSO - Yemen)$ 

3- The World Report 'The State of the World's Children 2019", UNICEF.

## **Evaluating the indicator:**

Along with Somalia, Sudan, and South Sudan, Yemen is considered one of the poorest countries in the Arab countries, in which very high rates have appeared compared to other Arab countries in early marriage for women between the ages of 20 and 24 and married before reaching the age of 15 and before reaching the age of 18. In Somalia (8%) of women got married before they got 15, and (45%) got married before they got 18. In Sudan (12%) of women got married before they are 15, and (34%) got married before they are 18. In South Sudan (9%) got married before they got 15, and (52%) married before they got 18.

## **Future Prospects:**

It is expected that the rates of early marriage for girls in Yemen will continue to be high as long as the Yemeni law does not specify the legal age for marriage.

The continuation of the war and the siege on Yemen will increase the suffering of the Yemeni families and thus rising the rates of early marriage for girls, and its effects on the risks of overpopulation.

## 5.5.1.a Proportion of seats held by women in the national parliaments

## **Definition of the Indicator:**

It is the ratio of the number of seats women obtained in parliamentary elections, and this percentage is calculated through the following formula:

The number of women in Parliament x  $100 = 1 \times 100 = 0.33\%$ .

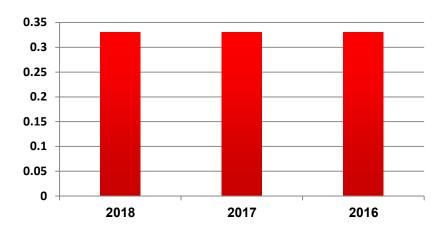
Total seats in Parliament 301

## Trends of indicator:



There have been no parliamentary or local council elections since 2006, and therefore the direction of this indicator has not changed during the last period, as it remained constant at a rate of (0.33%), and accordingly it is difficult to determine the direction of the indicator under this circumstance. It cannot be determined now but when parliamentary and local council elections taking place after stopping the war, establishing peace and starting the transitional phase.

Figure (47): Proportion of seats held by women in the national parliaments 2016-2018



## **Evaluating the indicator:**

Indicators and statistics identify the low participation of Yemeni women in various political fields. Yemen is deemed as one of the weak countries in the participation of women in political life, whether in Parliament or at the level of local councils. The situation goes along with most Arab countries that have the lowest rate in the world in terms of women's participation in political life.

## **Future Prospects:**

In light of the new polices of the government to encourage the participation of women in politics and at the local level, we expect that the participation of women in Parliament and local councils will increase by not less than 30%, according to the outputs of The Comprehensive National Dialogue held in 2013, which emphasized the need for the participation of women by not less than 30% in each areas.

Where it is expected to implement the electoral system in the list, which is considered better than the individual electoral system, in raising the percentage of women's representation in parliaments and local councils, as the woman's knowledge that her voice as a voter would have a positive impact, and her voice would have an impact in getting her representative to parliament or local councils, pushing them to positive participation, and vice versa, because they feel the futility of their vote leads them to refrain.

## 5.5.1.b Proportion of seats held by women in the local councils

## **Definition of the Indicator:**

It is the ratio of the number of seats women obtained in local elections, and this percentage is calculated through the following formula:

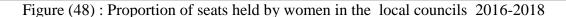
Number of women in local councils \* 100 =Total members of local councils

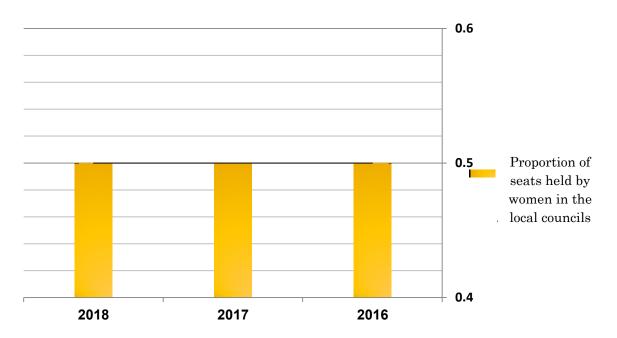
$$\frac{38 \times 100}{732} = 0.5\%$$

## **Trends of indicator:.**



When local council elections occur after the end of the war, the establishment of peace, and the start of the transitional phase, The trends of this indicator will be identified.





## **Evaluating the indicator:**

Indicators and statistics identify the low participation of Yemeni women in various political fields. Yemen is deemed as one of the weak countries in the participation of women in political life, whether in Parliament or at the level of local councils. The situation goes along with most Arab countries that have the lowest rate in the world in terms of women's participation in political life.

## **Future Prospects:**

In light of the new polices of the government to encourage the participation of women in politics and at the local level, we expect that the participation of women in local councils will increase by not less than 30%, according to the outputs of The Comprehensive National Dialogue held in 2013, which emphasized the need for women to participate in 30% in all areas. A decision was also issued recently to increase the participation of women at the local level.

## 5.a.1 Proportion of total agricultural population with ownership or secure rights over agricultural land

## **Definition of the Indicator:**

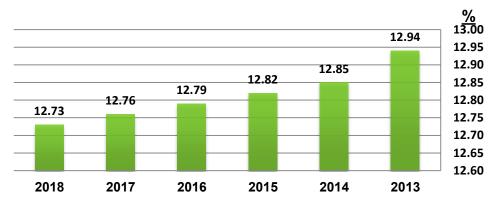
It refers to the number of residents who own or possess agricultural lands to the total agricultural population multiplied by 100.

It measures the extent of fragmentation and dispersal of agricultural lands by increasing the number of owners of agricultural lands in light of the steadiness or non-increase in agricultural lands, and this dispersion is usually due to the procedures of the inheritance system and the distribution of private land ownership to the heirs, this in turn negatively affects the economic profit from agriculture.

## Trends of indicator:.

This indicator seen a relatively minor drop for the population who own or hold agricultural lands from the total agricultural population during the period (2013-2018), where the average of this percentage reached an annual decrease of 0.03% during the last five years (2014-2018), with the exception of the major decrease in 2014, compared to 2013, when this percentage reached (0.09%).

Figure (50): Proportion of total agricultural population with ownership or secure rights over agricultural land 2013-2018



Source / Ministry of Agriculture and Irrigation.

## **Evaluating the indicator:**

It is better that the number of those who own agricultural land is not high or in a continuous increase as no noticeable increase or expansion in agricultural land, because such upsurge in the number of owners means an increase in the fragmentation and dispersion of agricultural lands and an increase in the number of small holders of land with small agricultural areas, This does not help in the transfer and diffusion of modern technology as well as the use of the agricultural machinery, and this in turn does not serve the quantitative and qualitative rise in the production of various agricultural crops nor the economic output from them, therefore the lack of sustainability of development in the agricultural sector.

## **Future Prospects:**

It is expected that there will be no increase in the percentage of this indicator during the next few years, and the rate of decline will remain very simple or constant, noting that the nature of agricultural lands located on the mountainous highlands are agricultural terraces. The state should increase the agricultural area and reclaim the arable land, while working to preserve the cohesion, lack of fragmentation and dispersal of agricultural lands among landowners, and this can be done through the establishment and work of agricultural societies and cooperatives, aiming to annexing and assembling the largest number of agricultural lands to carry out agricultural activity based on the framework of these blocks of agricultural societies or cooperatives and others.

## 5.b.1 Proportion of individuals who own a mobile telephone

## **Definition of the Indicator:**

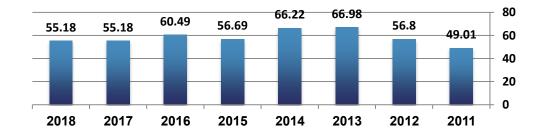
The concept of cellular mobile subscribers refers to mobile phone users who subscribe to a public mobile phone service that uses cellular technology that provides access to the public telephone network, and the users involved are the postpaid subscribers or prepaid subscribers, and the number of mobile subscribers is obtained for every 100 individuals of the population.

## Trends of indicator:.



The prevalence of mobile phone among the population witnessed a noticeable increase during the period (2011 - 2013), as it increased from (49.01) lines per (100) individuals in 2011 to (66.98) lines in 2013, then it observed a significant decrease during the period (2014-2015), when it reached (66.22) in 2014 to (56.69) lines for every (100) individuals of the population. Then it seen a obvious increase in 2016, where it reached (60.49), then this growth declined for two years (2017-2018), when it reached (55.18) lines for every (100) individuals of the population.

Figure (51): Proportion of individuals who own a mobile telephone 2011-2018



Source: - World Bank Group reports (2011-2018) based on ITU reports for the same years.

## **Evaluating the indicator:**

This variance in the data of this indicator regarding the prevalence of the mobile phone among the population in Yemen is attributed to the ordinary consequence of the deteriorating economic situation and political conflicts as it reaching (55.18) which is the least growth rate compared to the middle-income countries in (2018). Mobile phone companies operating in Yemen suffer from the lack of its capacity modernize and maintain to infrastructure, which has been extensively damaged since 2016, and telecom professional workers estimate that coverage is affected by 40% as a result of a large number of mobile cellular stations leaving the service and communication and internet services affected in many areas.

## **Future Prospects:**

. It is expected that there will be no advance in this indicator in the future as a result of the conditions in Yemen, where mobile phone companies suffer from their inability to update and maintain their infrastructure which has been subjected to extensive damage. Accordingly, a large number of mobile cellular stations being out of service. But even if situation becomes better , the improvement will be limited.

## Proportion of women in the labor market

## **Definition of the Indicator:**

It is the number of working women (15 years or more), that is, those involved in the labor market, to the number of women in the ages (15 years and over) multiplied by one hundred.

Number of working women (15 years and over) \* 100 =

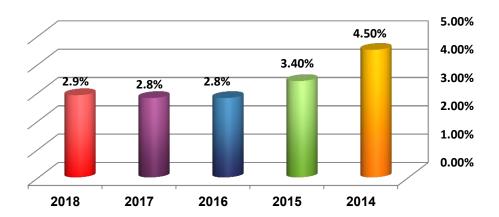
Total women ages (15 years and over)

## Trends of indicator:.



We note that the percentage of women involved in the labor market to the population of women of ages (15 years and over) reached (2.8%) in 2016 and 2017 and this means that for every 100 women of working age, there are only (3) working women and the percentage is still low in 2018 where it was (2.9%). There are still barriers for women to enter the labor market, and the state should take steps to overcome these barriers.

Figure (52): Proportion of women in the labor market 2014-2018



Source: The indicators were calculated based on the data of the Central Statistical Organization, Labor Force Survey 2014/2013..

## **Evaluating the indicator:**

The rate of women's participation in the labor market is low and it is needed to take measures to avoid the obstacles that Yemeni women face in order to obtain appropriate job opportunities and help them in improving their family's income. The low participation of women in labor market is vary from country to another and the legislation, economic , social and cultural aspects are interlinked. As women in the region face a set of pressures that determine where and when they can work, and this causes the available field of jobs to narrow. Many owners of companies in Arab countries also consider women to be less productive and employ them more expensive, and these concepts and restrictions lead to reducing opportunities on front of them to move and choose the positions of their work, but make them less attractive to employers . Women still represented a significant representation in the informal employment in developing countries.

## **Future Prospects:**

. It is expected that this indicator will improve, but in a simple way in the coming years because it is not easy to find essential and quick solutions to improve this indicator.

To encounter such problem, we think government should identify particular sectors for women to work in such as women underwear shops, or establishing factories or workshops in which men are to be banned to join them in order to encourage women to involve in the labor market.

## Number of fixed telephone lines per 100 population

## **Definition of the Indicator:**

## It is the number of fixed telephone lines, divided by the total population of the state, multiplied by 100, as this indicator is the most important measure of the development of telecommunications in any country, and

it reflects the extent of the spread of telephone

communication service at the level of the Republic of

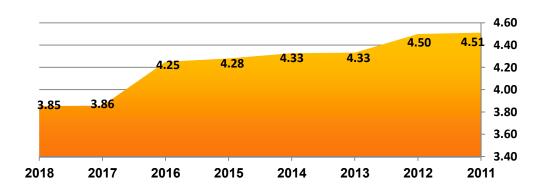
Yemen.

## **Trends of indicator:**.



This indicator perceived relative constancy during the period (2011 - 2012), as it reached (4.51 - 4.50) lines per (100) individuals, while it witnessed a noticeable decrease during the years (2013-2016), reaching (4.33 - 4.25) lines for every (100) individuals from the population. Then the period (2017-2018) seen a sharp decline, as the rate reached (3.86 - 3.85) lines for every (100) individuals of the population in 2018.

Figure (53): Number of fixed telephone lines per 100 of population 2011-2018



Source: - Statistics Yearbook for the years (2011-2018).

## **Evaluating the indicator:**

The rate of this indicator that is (3.85) is much lower than the developing countries and it is (10.6) per hundred of the population, and is significantly lower than the global average of (15.89) per hundred of the population.

The reduction in the number of fixed telephone lines per (100) individuals from the population in recent years is due to the economic conditions, and war on Yemen, the majority of the population has tend to purchase the mobile phone.

Source: International Telecommunication Union, "Measuring the Information Society Report, Geneva, 2014.

## **Future Prospects:**

This indicator is expected to remain as it is in the future or will witness a decline as a result of the technological and modern communications revolution, which has escalated and developed remarkably in the last ten years, which is expected to continue to rise in the future at a higher rate than the majority of the population requires the acquisition of the mobile phone.



## 6.1.1 Proportion of population using safely managed drinking water services

## **Definition of the Indicator:**

The percentage of population that receives an adequate supply of water (20 liters per person per day (safe) without contamination).

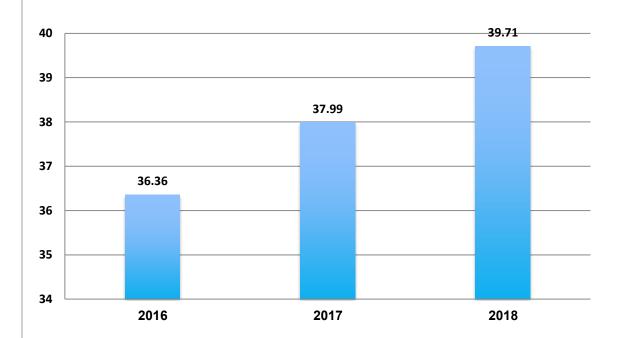
It is the rate that receives adequate supplies of safe (unpolluted) water from the total population (percentage)

## Trends of indicator:.



The percentage of the population that has access to safe drinking water increased from 36.4% in 2016 to 39.7% in 2018 and this slight increase is not attributed to the improvement of social services but rather to the spread of awareness and knowledge among citizens of diseases and epidemics caused by polluted water, especially after the spread of cholera and other diarrhea .

Figure (54): Proportion of population using safely managed drinking water services 2016-2018



## **Evaluating the indicator:**

Despite the increase of this indicator in 2018, this percentage is still below the level compared to middle-income countries where the percentage reached 90%.

Source: World Bank, World Development indicators.

## **Future Prospects:**

It is expected that the proportion of population who have access to safe water will rise very slightly due to the wide spread and knowledge among many citizens of the importance of obtaining safe water in order to avoid the spread of epidemics and diseases such as cholera, meningitis, and others as a result of awareness campaigns through various media by government agencies and international organizations.

## 6.1.2 Proportion of population using safely managed sanitation services

## **Definition of the Indicator:**

It refers to the percentage of population who receives health services for the disposal of human waste. They are the appropriate facilities from toilets constructed in simple ground pits, but they are protected toilets equipped with a siphon box connected to the sewage network. To ensure effectiveness, all facilities must be properly constructed and properly maintained.

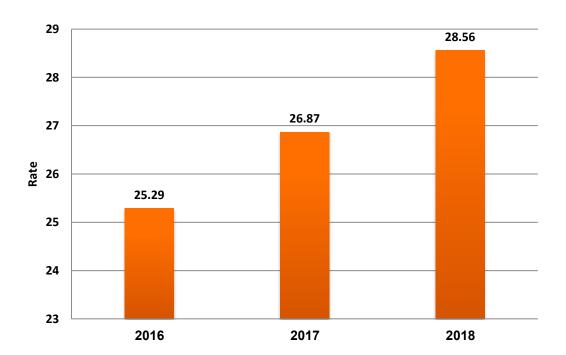
It also refers to the population that benefits from sanitation services from total population (percentage).

## Trends of indicator:.



The percentage of population that benefits from sanitation increased from 25.3% in 2016 to 28.6% in 2018.

Figure (55): Proportion of population using safely managed sanitation services 2016-2018



## **Evaluating the indicator:**

This indicator increased slightly, although it is still low compared to middle-income countries, which reached 60%.

Source: World Bank, World Development Indicators.

## **Future Prospects:**

Full service coverage is expected to remain without increase due to there are no extend new sewage networks constructed in the most cities of Yemen

## **6.4.1.a** Per capita share of renewable water

## **Definition of the Indicator:**

A per capita or annual share of the total population of renewable freshwater resources (in cubic meters, m3). It is calculated by dividing the total amount of annual renewable water resources in the republic (million cubic meters) / by the total population of the republic for the same year:

Renewable water resources amount (cubic meters) in the year)

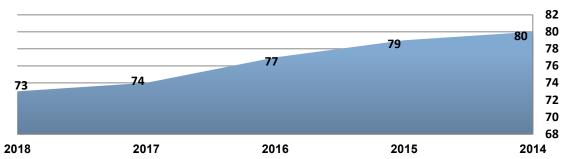
(Number of population)

## **Trends of indicator:**



This indicator viewed a decrease during the period (2014-2018) where the amount of water per capita was (80) cubic meters (CMs) in 2014 to continue its decrease to (73) cubic meters in 2018, with a decline of (7) cubic meters, and with an annually average decrease of about (1.5) cubic meters during the last five years. The reason for this fall is that Yemen suffers from a scarcity and paucity of water resources as a result of the reduction in the amount of rainfall, the increase in the evaporation rates of water due to the drought intensity, the high temperature in addition to the rise the population number and the agricultural sector accounting the largest share in the water consumption, as agriculture accounts for 90% of the total renewable water resources.

Figure (56) Per capita share of renewable water 2014-2018 (cubic Metric)



The Fourth Environmental Status Report of the Republic of Yemen 2018 - Public Authority for Environmental Protection World Bank Electronic Bulletin ,2013
Population Projections -CSO.

## **Evaluating the indicator:**

Source:

Yemen is one of the Arab and international countries in which the per capita water share is very low due to the water deficit between renewable, used or drawn water annually, as well as the increase in population growth. Per capita water in Yemen is considerably less than the internationally defined water scarcity line at (1,000) CMs per person per year. And compared to the average per capita share in the countries of the Arab region as well as with the global average. We find that per capita water in Yemen in 2012 was (84) CMs, while it reached (783) CMs as an average in the Arab region, and it reached (7,704) CMs in the global average. In 2014, this amount in Yemen reached (80) CMs, the average of Arab region was (751) CMs and the global average recorded (7525) CMs. Thus, the percentage of per capita water in Yemen is estimated at (10.7%) compared to the average for the Arab countries, and at a rate representing 1.1% compared to the global average.

(Source: Arab Report for Sustainable Development - First Issue 2015).

## **Future Prospects:**

It is expected that the quantity per capita of water in Yemen will decrease during the coming period to reach less than (60) cubic meters in 2025 due to the scarcity of water resources and weak nutrition for groundwater basins, the high population growth rate and the increase in economic activities, agriculture, drought ... etc. .

Therefore, the state should take fundamental measures and remedies to the water problem by setting effective water and population policies such as reconsidering the cultivation of agricultural crops with excessive consumption of water, the use of modern methods and technology for irrigation in agriculture, in desalination of sea water (through desalination plants), treatment the wastewater (sewage), maintenance of water distribution and delivery networks to population to reduce the amount of large wastewater that reaches (40%) ... and others.

# AFFORDABLE AND CLEAN ENERGY

## 7.1.1 Proportion of population with access to electricity

## **Definition of the Indicator:**

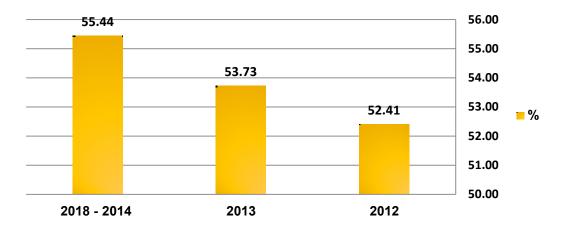
It expresses the percentage of population that receives government electricity. This indicator is measured by the number of individuals who use electricity from the public (government) network divided by the population multiplied by 100.

The indicator ratio was also measured by calculating the number of subscribers, attributed to the number of households for that year, according to the available data from the annual statistical book.

## <u>Trends of indicator :.</u>

An increase in the value of the percentage of population that benefits from government electricity services during the measurement years (2012-2014) was observed with close proportions between the current and previous years, where the rate of increase between years (2014-2018) over 2013 reached (6.2%), while the percentage of subscribers (55.44%) out the total number of families of of Yemen in 2014, therefore, no data were obtained to calculate this indicator for the years following 2014, which was followed by the ongoing war from 2015 until now and almost complete cessation of the provision of government electricity service especially for the majority of the northern and central governorates.

Figure (57) Proportion of population with access to electricity 2012-2018



## **Evaluating the indicator:**

It is hard to make comparisons of this indicator with some countries due to the lack of data for the years since 2015, as well as the interruption of government electricity service to many governorates and their resumption of some governorates, but when a comparison was made between Yemen and Sudan, which turned out that the number of subscribers in Sudan reached 2.5 million subscribers compared to Yemen, which reached (2014) 1 million subscribers according to the data for the statistical appendices to a report on statistics for Arab countries for the year 2017.

## Source:

Statistical Appendices - Consolidated Economic Report - Indicators for Arab Countries. 2017.

## **Future Prospects:**

The stability of the security and political situation in Yemen is essential in order to enable the related authorities to produce detailed data to measure this indicator in order to get data internationally compared.

Consequently, government electricity services and their connection to service delivery for all subscribers have improved compared to the present time in which solar energy or private generators are vast used by majority households.

## Foreign Direct Investment (FDI) out ward as a percentage of GDP

## **Definition of the Indicator:**

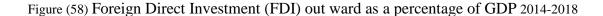
It is the total foreign direct investment issued attributable to "GDP%", which is the investment abroad and is represented in the contributions of Yemeni banks to foreign banks and also "commercial facilities that are granted in short-term."

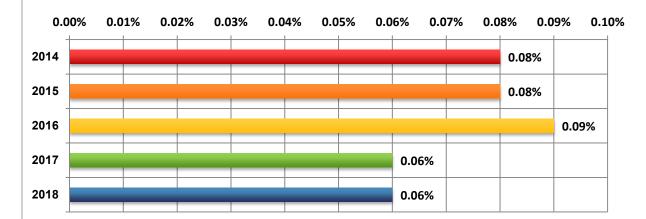
The foreign direct investment constitutes a contribution to the global partnership by providing external financing resources for the receiving country and international financial markets.

## **Trends of indicator:**



The contribution rate of this indicator to the GDP declined as it reached 0.09% in 2016, while in the following two years 2017 and 2018, it decreased to 0.06%. In fact, its contribution to the GDP is very small.





Sources: - Balance of Payments (Central Bank of Yemen).

- Estimates of national accounts (CSO).

## **Evaluating the indicator:**

The data of this indicator is scarce for countries similar to our economic situation, which made it difficult to be comparable.

## **Future Prospects:**

This indicator will not observe a significant improvement in the coming years, except by working to increase domestic investment in the outside world through the diversity of economic sectors and areas in which it invests.

## Foreign direct investment (FDI) in ward as a percentage of GDP

## **Definition of the Indicator:**

It is the total foreign direct investment incoming attributable to "GDP%". In Yemen, it represents the expenses of oil companies (inflows), as well as the contribution of foreign investment in Yemeni banks and in companies with different activities.

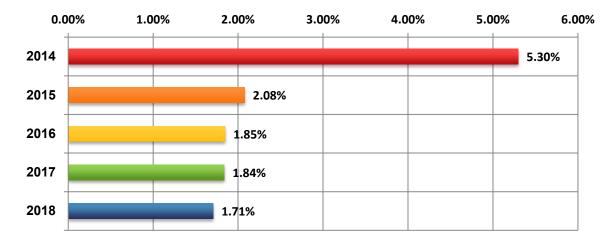
Provided that the percentage of ownership in shares or voting power is 10% or more of the company's assets and it is made through a contribution to capital or reinvestment of returns to GDP. Incoming foreign direct investment constitutes external funding sources for the country, and an indication of an improvement of the overall investment climate in it.

## **Trends of indicator:**



In the years 2016 and 2017, this indicator achieved a close percentage contribution to GDP, which is 1.85% and 1.84%, respectively, but in 2018, this contribution reduced to 1.71%.

Figure (59) Foreign direct investment (FDI) in ward as a percentage of GDP 2014-2018



## Sources:

- Balance of Payments (Central Bank of Yemen).
- Estimates of national accounts (CS).

## **Evaluating the indicator:**

Jordan, Tunisia, Djibouti, Palestine and Morocco recorded an increase in the direct income balance surplus at rates ranging between 5.3 % and about 60.0 % during 2017. Sudan experienced an increase in the deficit, while the deficit shrunk in of The Comoros Islands and Mauritania during 2017.

## **Future Prospects:**

If economic and political stability take places with safe environment that will drive many companies to invest in Yemen, then this indicator is likely to rise of its contribution to GDP, especially if oil production gets back to its previous scale and thus the oil companies will return to practice their activities normally.

## Current account as a percentage of GDP

## **Definition of the Indicator:**

It is the total current account and it is (net of trade balance of goods and services, net of income and net of current transfers) divided by GDP, and it reflects the extent of the national economy's openness to the outside world and the size of its participation internationally.

## **Trends of indicator:**



The data indicate that the current account scored a deficit in 2018 amounting to \$ 1.1 billion, and this noticed when we see the figure of this indicator and its trend towards a decline in its contribution rate for the period (2016\_2018). In 2016, its contribution to the GDP was 9.01%, to decrease In the following year to 5.87%, in 2018, it touched about 3.61% of GDP.

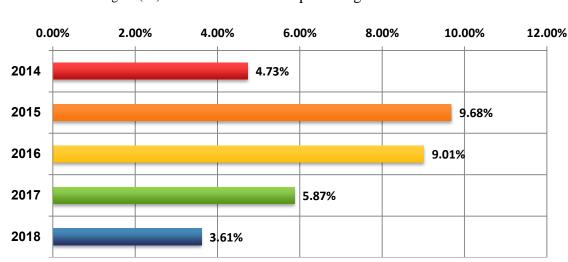


Figure (60) Current account as a percentage of GDP 2014-2018

## Sources:

- Balance of Payments (Central Bank of Yemen).
- National accounts estimates (CSO).
- The performance of the national economy report during 2018 (Ministry of Finance), Yemen.

## **Evaluating the indicator:**

According to the Arab Monetary Fund report, Yemen has achieved a deficit in the ratio of the current account to the GDP, and it comes better than some Arab countries such as Lebanon, Djibouti, and Algeria, and lagging behind some countries such as Palestine, Jordan, Comoros Island, which suffers of a current account deficit.

## **Future Prospects:**

If the economic conditions improve and exports return to rise against imports, this will improve the trade balance, and thus the current account will achieve a surplus instead of the deficit.

## Ratio of investment to GDP

## **Definition of the Indicator:**

It is the total capital formation in a year divided by the GDP for the same year. This indicator helps to measure capital growth and the development of the size of capital accumulation in the national economy available to finance economic development and it is considered an important element in the process of sustainable development.

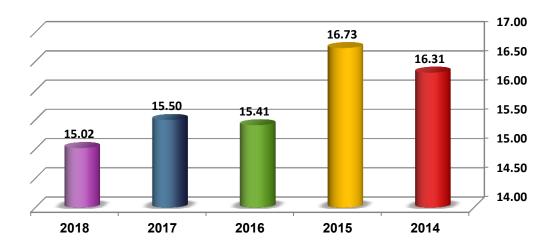
## **Trends of indicator:**



During the 2016-2018 period, this indicator (the ratio of investment to GDP) recorded close proportions of (15.41%) in 2016, (15.50%) in 2017 and (15.02) in 2018.

Source: National Account Bulletin - CSO, December 2018.

Figure (61) Ratio of investment to GDP in current prices 2014-2018



## **Evaluating the indicator:**

The proportion of investment to the of GDP of Yemen in 2017, which is about 15.5%, exceeded some similar countries such as Libya 2.0% and Iraq 8.6%, while it appeared less than the percentage recorded in Sudan in 2017 which amounted to 20.8%

Source: The Consolidated Arab Economic Report 2016-2017.

## **Future Prospects:**

This indicator is not expected to improve significantly due to the decline in investment spending as a result of scarce resources along with the prolonged period of the war on Yemen and the lack of opportunities for solutions that create stability.

## 8 DECENT WORK AND ECONOMIC GROWTH

## 8.1.1 Annual growth rate of real GDP per capita

## **Definition of the Indicator:**

It is the percentage of growth of real GDP generated from the following equation

(current GDP x previous GDP x 100 -100), which shows whether or not the performance of the national economy has improved..

## **Trends of indicator:**



The decline of the national economy continued during the period 2016-2018, where the cumulative rate of drop during the same period was estimated at approximately (25.3) percentage points, registering negative growth rates distributed in varying proportions, estimated at (14.61% -) in 2016 and (9.96% - (in 2017 and f) 1.35-) in 2018.

Source: National Account Bulletin - CSO, December 2018.

Figure (62) Annual growth rate of real GDP per capita 2014-2018



## **Evaluating the indicator:**

During the period 2016-2018, the economy of Yemen did not score any positive growth rates, where its rate ranged between (-14.61%) in 2016 and (1.35%) in 2018 compared to countries with fragile economies affected by conflict, in which it achieved positive rates of (5.2%) (3%) and (2.3%) during the same period, respectively.

Source: World Bank Indicators page https://data.albankaldawli.org/indicator/

## **Future Prospects:**

Economic growth rates are expected to remain sluggish, affected by instability caused by war and lack of neutrality with the various tools of the national economic sector.

## 8.2.1 Annual growth rate of real GDP per employed person

## **Definition of the Indicator:**

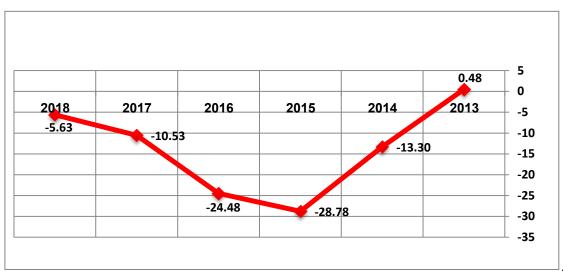
It represents the growth of the per capita real GDP per employed person for each year out of the previous year.

## **Trends of indicator:**



The annual growth rate of the per capita worker's real GDP witnessed a clear decline, reaching in 2016- 24.5%, and continued to drop in 2017, at 10.5-% and in 2018, at -5.6%, this is due to the waning in GDP and low economic growth rate.





## Sources:

- Estimates of national accounts (CSO) Yemen.
- Economic Integration Report for the Horn of Africa..

## **Evaluating the indicator:**

.The massive backwardness for growth of the per capita real GDP per employed person bring Yemen getting down in its ranking compared to some countries of the horn of Africa as well as with the poor Arab countries that suffer of high rate of unemployment.

## **Future Prospects:**

The growth rate of the per capita worker is linked to the growth in FDP, and in case that the GDP witnesses positive growth, the per capita growth is expected to fall down.

## 8.5.2 Unemployment rate, by sex

## **Definition of the Indicator:**

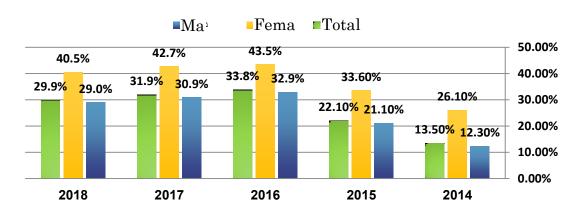
## It refers to the number of persons who are able to work and are willing and prepared to work when the opportunity is available and they have carried out activities to search for work within a short period recently, expressed as a percentage of the total number of people who constitute the work force.

## **Trends of indicator:**



The unemployment rate in 2016 was 33.8% of the total workforce participants by 32.9% for males compared to 43.5% for females, and it is noticed that the overall unemployment rate decreased from 33.8% in 2016 to 31.9% and 29.9% in 2017 and 2018 respectively. The reason for the high unemployment rate in 2016 compared to the year 2014 is due to the war that erupted in 2015, when a large percentage of workers lost their jobs. The unemployment rate perceived a decline in 2017 and 2018 compared to 2016, for males and females as shown in figure no. 1. It is noted that the female unemployment rate in all years is much greater than the male unemployment rate for several reasons such as low level of education for females compared to males and other reasons have led to the lack of employment opportunities for them ... etc.

Figure (64) Unemployment rate, by sex 2014-2018



Source: Indicators were calculated based on the data of the Central Statistical Organization, Labor Force Survey 2014/2013

## **Evaluating the indicator:**

The unemployment rate in Yemen is one of the high rates compared to many Arab countries as well as regional and international because of the lack of job opportunities and the low educational level of workers. As for the gender level, women in Yemen face a set of pressures determining where and when they can work, and this causes the narrowing of the available field of jobs, and this is one of the most important reasons for the high unemployment of women in Yemen. If we look at the unemployment rate data in Sudan, which the economic situation is similar to Yemen, it reached 20.6% in 2016, while in 2018 it was 20%.

## **Future Prospects:**

It is expected that unemployment rates will decrease during the coming years as a result of implementing some development projects, especially commercial projects, within the framework of the national vision adopted by our country, and therefore we see that the following measures are suggested to be taken in account for the help to reduce the unemployment rate:

- Monitor labor market requirements at the local and regional level and urge educational and training institutions to respond to these requirements.
  - Focusing on the concept of education and training to ensure that young people keep pace with market requirements and achieve professional growth to keep pace with scientific and technical progress.
  - Expanding and facilitating the financing of small and medium enterprises.
- Stimulating the private sector to employ youths.

## 8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training

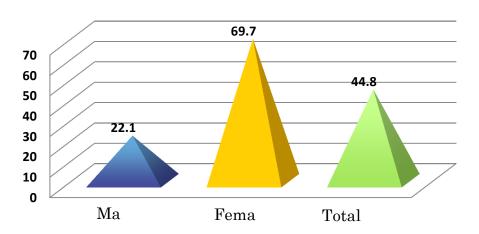
## **Definition of the Indicator:**

It is the percentage of young people (aged 15-24 years) who are not in education, work nor in training. This indicator is calculated by the following formula: (youth - working youth - non-working youth but enrolled in education or training) / (youth) \* 100.

## Trends of indicator:

As a result of the conditions in Yemen, there is no doubt that there is a significant rise in the percentage of young people (aged 15-24 years) and are not in education, work norin training, but unfortunately we were unable to obtain accurate data on the direction of this indicator.

Figure (65) Proportion of youth (aged 15-24 years) not in education, employment nor training



Source: 2013-2014 Workforce Survey.

## **Evaluating the indicator:**

Yemen suffers from a high percentage of youth in the age group (aged 15-24 years) who are not in education, work nor in training compared to other Arab countries. For example, in Palestine it touched 32.3%, in Egypt 34.4% and in Mauritania 39.5% while the percentage in Yemen was 44.8%, which clarifies the extent of the problem that affects upon Yemen.

Source:

Human Development Manuals and its Indicators Report, Statistical Update for 2018.

## **Future Prospects:**

Certainly, the scale of this phenomenon has increased worsened, especially with the upturn in the dropout from education, which has reached about 3 million students, in addition the most factories and private companies in Yemen have stopped due to the ongoing war on Yemen.

## 8.7.1 Proportion and number of children aged 5–17 years engaged in child labor, by sex and age

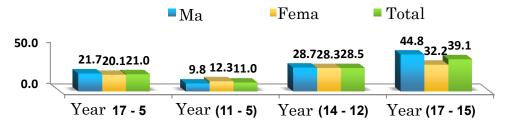
## **Definition of the Indicator:**

It refers to the number of children aged (5-17) years who are involved in the labor market (according to the classification of child labor), attributed to the total children in the age group (5-17) years for both sexes and by age groups. The rate of child labor is measured through the results of household surveys on the workforce or surveys and studies on child labor.

## <u>Trends of indicator:</u>

Based on the results of the National Survey of Child Labor 2010 in Yemen, which indicated that 21% of children aged (5-17 years) are employed, and according to the figure below, the work rate is higher for older children compared to younger children, where the rate of children working in ages (5-11) years was 11%, distributed between 12.3% for females compared to 9.8% for males, and this percentage rises to 28.5% among children between the ages (12-14) years and to 39.1% among children between the ages (15-17) years and by 44.8% for males compared to 32.3% for females, and in general the average working male child is 21.7% compared to 20.1% for females .

Figure (66) Proportion and number of children aged 5-17 years engaged in child labor, by sex



source: Source: 2010 Child Labor Survey - in addition to subsequent studies of the International Labor Organization...

## **Evaluating the indicator:**

Looking at the indicator for child labor globally with (9.6%) shows that nearly half of them perform dangerous work, and in regard to Arab countries, it is (2.9%), of them (1.5%) perform dangerous work, according to estimates (2012 - 2016) Yemen has the highest percentage of children working in ages (15-17 years) in the Arab countries by (34.8%), followed by Sudan and Iraq) by (19.2% and 13.5%), respectively compared to Jordan as lower rate of (5.6%) for the same age group, as it became clear that the percentage of working children in Arab countries rises as the age group increases, and on the other hand, the rate of children male working is greater than that of females, except for both Palestine, females are more than males for the age group (15-17) years, where the percentage of females reached (15.7%) compared to (0.9%) for males, as well as in Iraq for the age group (5-14) for females was (3.3%) whereas (1.6%) for males. Consequently, Yemen is considered to have the highest rate of child labor in the Arab world. When making comparisons of the indicator in Yemen with a number of countries such as (Sudan, Nepal, Senegal, and Afghanistan), the value of the child labor was respectively (18.1%, 21.7%, 22.8%, 21.4%) that are close compared to Yemen (21%).

Sources: The main source of labor statistics (ILO STAT)

The Sustainable Development Report in Iraq 2017

- Child Labor in Arab Countries (Quantitative and Qualitative Study) - General Secretariat of the League of Arab .States - Social Affairs Sector 2019.

## **Future Prospects:**

To reduce child labor and dropping the indicator through:

- Strengthening legislation related to child labor and its save mechanisms: the minimum age for employment and forms of hazardous employment, the minimum wage and benefits, and the inspection mechanism.
- Awareness and social mobilization.
- Eliminate poverty
- And it Is important to catty out regular surveys and studies related to child labor in private or within the household or workforce surveys.

## 8.10.1.a Number of commercial bank branches per 100,000 adults

## **Definition of the Indicator:**

Total commercial banks operating in a given year.

## **Trends of indicator:**



The number of commercial banks decreased in the years 2014-2017 compared to the number in the previous years by 10%.

In the years 2010-2011, the number of 20 banks decreased to 18 banks in the years 2014-2017 due to the impact of the financial and banking sectors in Yemen as a result of the aggression .

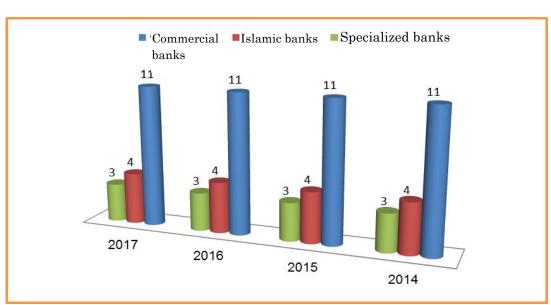


Figure (67) Number of commercial banks 2014-2017

Source: Yemen Central Bank.

## **Evaluating the indicator:**

It is clear that the number of commercial banks in Yemen is low compared to other Arab countries due to many reasons, mainly the economic situation and war. The different reports showed that Yemen is classified among the least countries in the inclusion of commercial banks in the last five years.

Source: World Bank - Human Development Indicators.

## **Future Prospects:**

The growth in the number of commercial banks is expected to continue to weaken in the coming years due to the security situation in Yemen.

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## 8.10.1.b Number of automated teller machines (ATMs) per 100,000 adults

## **Definition of the Indicator:**

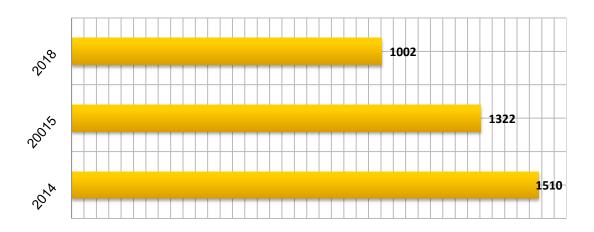
Total Automated Teller Machines ATMs operating in a given year.

## **Trends of indicator:**



The number of ATMs in Yemen reached 1002 ATMs in 2018 compared to 1322 and 1510 ATMs in previous years 2015 and 2014 respectively with decline of 33% . The decline in ATM numbers is attributed to the poor state of the banking system in Yemen since 2015.

Figure (68): Number of ATMs 2014-2018



Source: Yemen Central Bank.

## **Evaluating the indicator:**

Yemen is one of the weak countries in the field of the number of ATMs compared to the rest of the countries of the region or the countries of the Horn of Africa. the number of ATMs in country like Syria exceeds 3000 ATMs.

Source: World Bank Report 2018.

## **Future Prospects:**

It is expected that the growth of the number of ATMs will continue to weaken in the coming years due to the economic situation in Yemen which will significantly affect all financial and banking sectors, including ATMs.

## 8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution

## **Definition of the Indicator:**

Total adults who have a bank account in a bank in a given year divided by the total adult population multiplied by 100.

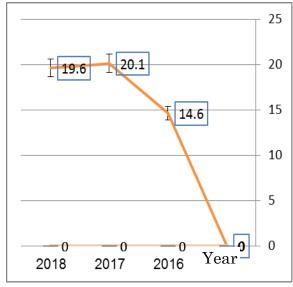
Total adults with a bank account in a year x 100 Total adult population

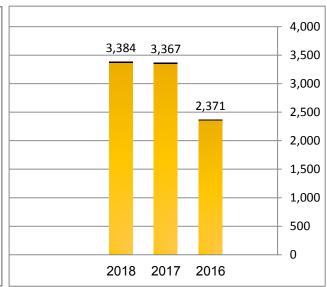
## Trends of indicator:



It is noticeable that the feebleness growth in the number of personal bank accounts for adults during the period 2016-2018, in which the bank accounts reached (2.371.468) in 2016, with percentage not exceeding 15% of total adults compared to (3.366.025) accounts in 2017 and by 20%. Percentage of the adult population who have a bank account in 2018 fell down to reach (3,384,470) accounts and by 19.6%, with a decrease rate of 0.5% compared to 2017.

Figure (69): Number and percentage of adults with bank accounts 2016-2018 (000 accounts)





## Evaluating the indicator:

Yemen is one of the weakest countries in the number of adults with a bank account compared to the rest of the countries of the region or the Horn of Africa, where the proportion in the least country reaches 30%.

Source: World Bank Report 2018.

## Future Prospects:

It is expected that the growth in the number of bank accounts will continue to decline in the coming years due to the economic situation in Yemen, which will have a significant impact on all financial and banking sectors.

## The Annual Income

## **Definition of the Indicator:**

It is the total income that individuals or households receive from any source of income such as salaries, investments, incentives, compensation, social security, dividends, etc.

The inflation rate was used to estimate income according to the data obtained from the 2014 Household Budget Survey.

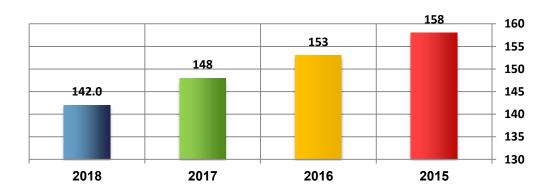
Source: G. Management of CPI – HHBS data 2014 –CSO.

## Trends of indicator:



From the data of the Household Budget Survey 2014, the total annual income was approximately 4,343 billion riyals. Due to the lack of actual data for the following years, the inflation rate of consumer prices was used to estimate the data for those years, which showed the continued decline in the average annual per capita income, which reached its lowest level around (143) thousand riyals in 2018, it was estimated at about (153) thousand riyals in 2016 and (148) thousand riyals in 2017.

Figure (70): Average of annual income 2015-2018 (000 YR)



## **Evaluating the indicator:**

According to the World Bank classification, the Republic of Yemen ranks sixth in the group of low-income countries in 2018, and has maintained this position since 2016. The decline in annual income is due to the disruption of factors of production due to the outbreak of war and the interruption of salaries of government employees in whole or in part.

Source: World Bank Indicators page

https://data.albankaldawli.org/indicator/

## **Future Prospects:**

It is expected that this decline will continue in the future as the horizon of political solutions to the existing conflicts becomes obstructed. If the existing conflict to be conciliated, the level of annual income will improve slowly due to that the restore of fragile economy will not take place rapidly ,since all sectors have suffered of damages because of war, and particularly if that — accompanied by weakness in the performance of the government.

## **Gross Domestic Product (GDP**

## **Definition of the Indicator:**

The nominal GDP is the monetary value of all finished goods and services produced within a country's borders within a specified period of time.

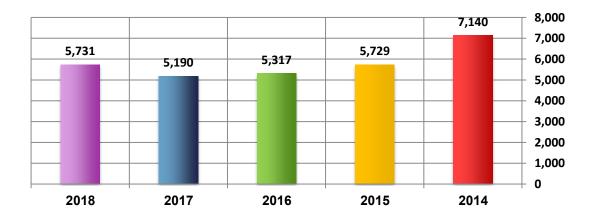
## **Trends of indicator:**



During 2016-2018, the nominal GDP appeared in an unstable situation, while its value during 2016 was about (5,317) billion riyals, it fell to (5,190) billion riyals in 2017 and then slightly increased during 2018, a positive difference from 2017 estimated at (541) billion to reach (5,731) billion riyals.

Source: Bulletin of GDP - CSO ,December 2018.

Figure (71): GDP 2014-2018 (Billion YR)



## **Evaluating the indicator:**

During 2018, the nominal GDP of Yemen was estimated at approximately (22.9) billion dollars at the exchange rate (250) riyals per dollar compared to (22.4) billion dollars average GDP in fragile and conflict-affected economies by a positive difference of about half a percentage point. If the dollar were valued at the equivalent exchange rate, total output would not exceed \$ 12 billion dollars at best.

Source: World Bank Indicators page https://data.albankaldawli.org/indicator/...

## **Future Prospects:**

It is expected that the nominal GDP will remain under the standard level due to its impact on the existed aggression and the absence of political solutions.

### Gross National Product (GNP)

### <u>Definition of the Indicator:</u>

Is the value generated from total final sales of goods and services plus change in inventories. It is a measure of the economic performance of the whole society.

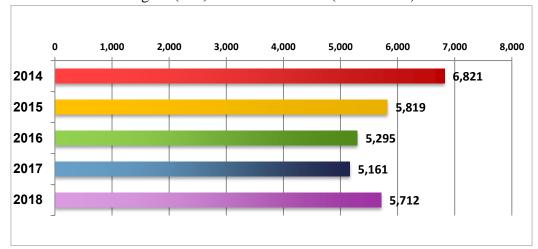
### Trends of indicator:



The GNP scored a slight rise in 2018, achieving a value of 5,712 billion YR from its position in 2017, which recorded 5,161 billion YR, reduced by 134 billion YR from the value achieved in 2016 that was approximately (5,295) billion YR.

Source: Bulletin of GDP - CSO,, December 2018

Figure (72): GNP 2014-2018 (Billion YR)



### **Evaluating the indicator:**

According to the official exchange rate of 250 riyals per dollar, the GDP amounted to about 22.8 billion dollars in 2018 compared to about 22.4 billion dollars on average for the GDP in the countries group of fragile and conflict-affected economies for the same year. If dollar were valued at the equivalent exchange rate ,the GDP of Yemen for 2018 will not exceed 9 billion dollars at best.

Source: World Bank Indicators page :https://data.albankaldawli.org/indicator/

### **Future Prospects:**

No significant improvement in this indicator is expected due to the continued decline in the balance of payments and the achievement of negative rates with the outside world.

### GDP per capita at market price

### **Definition of the Indicator:**

The value generated by GDP at current prices divided by the total population .It is one of the most important measures of the level of economic development and the overall performance of the national economy.

### Trends of indicator:

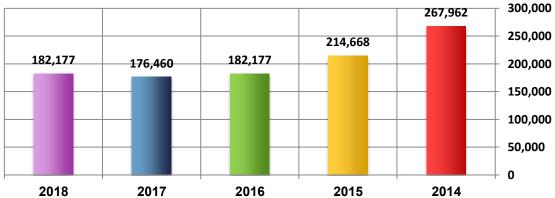


This index showed unstable values during the period 2016-2018, where the lowest value in 2017, which showed a decline to (176,460) riyals from the value recorded in 2016, which amounted to (182,177) riyals, in 2018, it was estimated at approximately (182,177) YR.

Source: Bulletin of GDP - CSO,, December 2018

267,962

Figure (73): GDP per capita 2014-2018



### **Evaluating the indicator:**

GDP per capita in the Republic of Yemen does not exceed (50%) of the average per capita in the group of fragile and conflict-affected economies, amounted to about (1615) dollars, while in Yemen did not exceed (727) dollars on average for the period 2016-2018 at the official exchange rate issued by the Central Bank of Yemen.

Source: World Bank Indicators page

https://data.albankaldawli.org/indicator/

### **Future Prospects:**

Due to the declining performance of the economy, per capita GDP is expected to remain low and no improvement is expected in the current situation.

### Economic activity rate (labor force participation rate) by sex

### **Definition of the Indicator:**

Labor force participation rate is an indicator that measures the participation of the working age population 15 years and over in the labor force (employed or unemployed), which is the ratio of the labor force to the population aged 15 years and over.

### Trends of indicator:

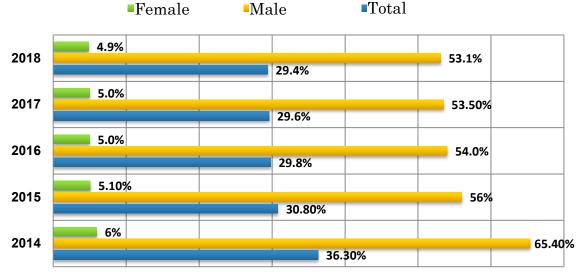


The labor force participation rate is one elements of good economic exploitation of resources and therefore many countries seek to increase labor force participation. As long as women have struggled to find better jobs, but despite the progress achieved in the field of educational attainment, the majority of women are still outside the labor force and their participation rate in the labor force is low compared to that of men .It is noted that the participation rate in the labor force for both sexes reached (29.8%) in 2016. (54.0%) for males and (5.0%) for females. This indicator remain stagnating during 2017 and 2018 due to the ongoing war to date which negatively affected the national economy in general.

Figure (74): The labor force participation rate 2014-2018

Male

Total



Source: Indicators were calculated based on the data of the Central Statistical Organization, Labor Force Survey 2014/2013

### **Evaluating the indicator:**

This indicator is still low in our country compared to some Arab countries and needs to take measures to improve it during the coming period.

If we look at the labor force participation rate in Sudan in 2018, it reached 50.5% (69.8%) for males and (23.5%) for females.

### **Future Prospects:**

The labor force participation rate is expected to improve only as a result of the implementation of national vision programs and the development of strategic plans and policies in the economic field.

### Age dependency ratio

### **Definition of the Indicator:**

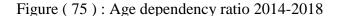
Age dependency ratio of the population under age of 15 years and those aged 65 years and over to number of the working population aged (15-64) years multiplied by one hundred.

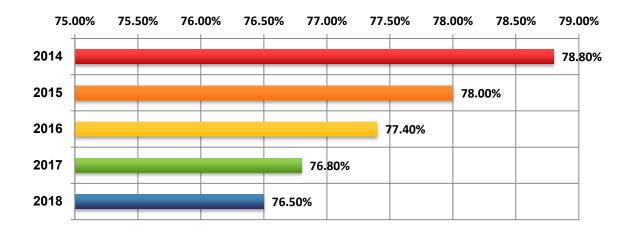
Population under age of 15 years and those aged 65  $\pm$  \*100

Number of the working population aged (15-64)

### **Trends of indicator:**

Age dependency ratio witnessed a slight reduce, from (77.4%) in 2016 to (76.8%) in 2017 and to (76.5%) in 2018.





Source: Indicators were calculated based on the data of the Central Statistical Organization, Labor Force Survey 2014/2013

### **Evaluating the indicator:**

Age dependency ratio in Yemen is of one of the high rates in the world that reached 76.5% in 2018 compared to other countries. If we look at the data of the age dependency ratio in Sudan in 2018, it is 79%.

### **Future Prospects:**

The indicator is expected to moderately decline over the next few years as some development projects are created.

### Percentage of Employment in Agricultural Sector by Sex

### **Definition of the Indicator:**

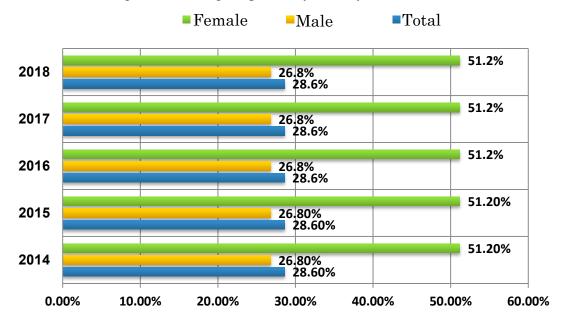
It is number of workers in the agricultural sector to the total employed in all economic sectors multiplied by one hundred.

Number of workers in the agricultural sector \*100 Total employed in all economic sectors 64)

### **Trends of indicator:**

The data show that (28.6%)of workers are engaged in agriculture for both sexes and males, (26.8%) for males and (51.2%) for females during the period 2016-2018. This indicates that Yemeni society is characterized by being a traditional agricultural society.

Figure (76): Age dependency ratio by sex 2014-2018



Source: Indicators were calculated based on the data of the Central Statistical Organization, Labor Force Survey 2014/2013

### **Evaluating the indicator:**

This indicator is high and it identifies that many people, especially in the countryside, depend on food consumption from their own production .The employment rate in the agricultural sector in Sudan, for example reached 43% in 2018.

### **Future Prospects:**

This indicator is expected to focus on the fruitfulness of agricultural land in Yemen and the dependence of many people on their agricultural products, especially food products.

### **Consumer Price Inflation**

### **Definition of the Indicator:**

It is the increase percentage in the consumer goods and services prices, which shows the continuous rise .it is one of the most important indicators to measure macroeconomic performance and economic stability. It is also one of the Indicators that tracked by monetary policy, as well as one of the factors that influencing the investment climate and In the distribution of tangible income in the general level of prices in a country.

Inflation is calculated according to the following formula:

Inflation rate:

General lv of prices in comparison prd – G. lv of prices for previous period  $\times$  100

The general level of prices in the previous period

### **Trends of indicator:**

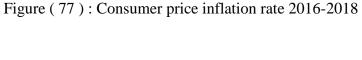


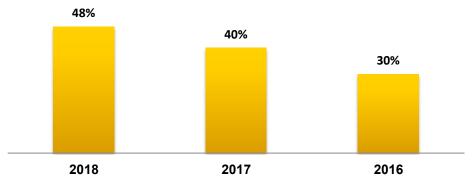
Consumer price inflation continued to rise during 2016-2018. In 2016, the inflation rate reached 30% and continued to rise until it reached 40% in 2017 to reach 48% in 2018. These rates according to the source of the Central Statistical Organization are not fully reflective of 2018, since CSO did not collect prices except for the last quarter of 2018. There was a crisis in of oil derivatives and a rise in exchange rates in the first months of 2018

Source: Consumer Price Index Bulletin, December 2018

Source: World Bank Indicators page

http://pubdocs.worldbank.org/en/863851539102254914/20190007 25ARAara013-mpo-am18-yemen-yem-9-14-kc-new.pdf





### **Evaluating the indicator:**

During the period 2016-2018, the inflation index rose at the general level of consumer prices for several reasons, the most important of which were the high exchange rate and the lack of oil derivatives that affected the costs of transport and storage and the availability of goods and the provision of services that depend heavily on oil derivatives, the suspension of the most important food product factories. Most of them are due to power cuts and lack of oil derivatives.

Source: World Bank Indicators page

https://data.albankaldawli.org/indicator/

### **Future Prospects:**

Inflation rates are expected to remain high, but not to the same degree of influence. The family and business community has tended to use the appropriate alternative energy if there is a crisis for oil derivatives and thus intermittent crises will not have the same effect at that time on the price level, but may occur if those crises continue at times. In addition to the fluctuations in exchange rates, which would have a significant impact on the value of the local currency against foreigners.

### Public debt as a percentage of GDP

### **Definition of the Indicator:**

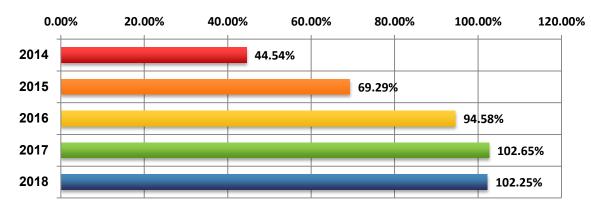
The total public debt divided by GDP%, and the public debt is divided into two parts (internal and external).

### **Trends of indicator:**



The continued accumulation of the budget deficit in recent years has led to an increase in the contribution of public debt to GDP. In 2016, its contribution amounted to 94.58%, while in 2017 and 2018 the ratio was more than 102%, and the rise in public debt negatively affects "income, revenues and production, It also leads to increase expenditures on debt service.

Figure (78): Public debt as a percentage of GDP 2014-2018



### Sources:

- Government Finance Statistics (Ministry of Finance).
- Estimates of National Accounts (CSO).
- Unified Arab Economic Report (Arab League).

### **Evaluating the indicator:**

Compared to the Arab countries close to our situation, the total public debt as a percentage of GDP increased in 2017 in Mauritania by 89.5%, and in Lebanon it reached 150.7%.

### **Future Prospects:**

The high and dynamic increase of public debt and public debt service will undoubtedly rise the burden on the public budget and also "the negative impact of net debt flows on the resources of the national economy.

# 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

### 9.2.1 Manufacturing value added as a proportion of GDP and per capita

### **Definition of the Indicator:**

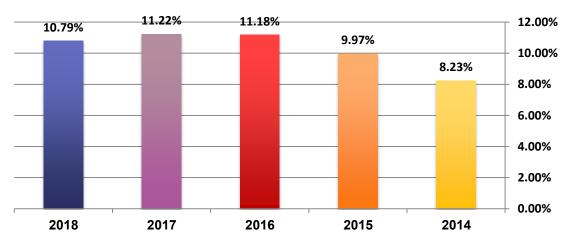
The value added of manufacturing industries divided by GDP %, and we extract it by excluding the value of intermediate consumption from the total value of production.

### Trends of indicator:



Looking at this indicator, the ratio of manufacturing industries to GDP is almost the same as it reached 11.18%, 11.22% and 10.79% during 2016, 2017 and 2018 respectively.

Figure (79): Manufacturing value added as a proportion of GDP and per capita 2014-2018



### Sources:

- Estimates of National Accounts (CSO) 2018.
- Report on the Economic Integration of the Horn of Africa

### **Evaluating the indicator:**

The contribution of the manufacturing industry of the Horn of Africa countries is as follows: Djibouti 22.7%, Ethiopia 13.4%, Sudan 23%. The integration between the Horn of Africa countries as strategic alternative to achieve sustainable development and political and social stability for them and for all countries of region .

### **Future Prospects:**

This indicator, like other indicators, is contingent on the improvement of the difficult economic conditions surrounding us, as this activity is considered one of the most activities that absorb the labor force and reduce the unemployment rate in the country.

### 9.2.2 Manufacturing employment as a proportion of total employment

### **Definition of the Indicator:**

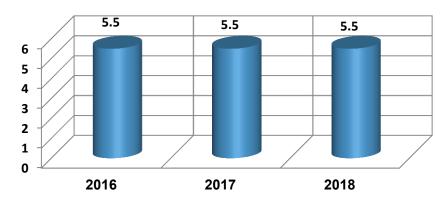
It is the number of workers in manufacturing industries to total workers in all economic sectors multiplied by one hundred.

### <u>Trends of indicator:</u>



Data show the decline in the employment rate in manufacturing industry and its continuation at the same level during years 2016-2018, and the figure shows that the ratio stagnated at 5.5% during the period 2016-2018. There is an urgent need to raise this indicator in the coming years through the development of economic plans and programs to develop industry field in general and manufacturing in particular.

Figure (80): Manufacturing employment as a proportion of total employment 2016-2018



Source: Indicators were calculated based on the data of the Central Statistical Organization, Labor Force Survey 2014/2013.

### **Evaluating the indicator:**

The distribution of employment by economic activity is an significant indicator of the degree of economic and social development experienced by a country. The advanced societies are eminent by balancing of the distribution between various sectors as well as the high proportion of workers in the manufacture sector and low proportion in the agriculture sector .It is therefore necessary to take measures to increase the proportion of workers in the manufacturing industry.

### **Future Prospects:**

After the implementation of the National Vision, there is an anticipation that this indicator will grow up depending on the introduction of modern technology in industry field as well as training, qualifying and upgrading the skills of workers in this important economic sector.

### 9.3.1 Proportion of small-scale industries in total industry value added

### **Definition of the Indicator:**

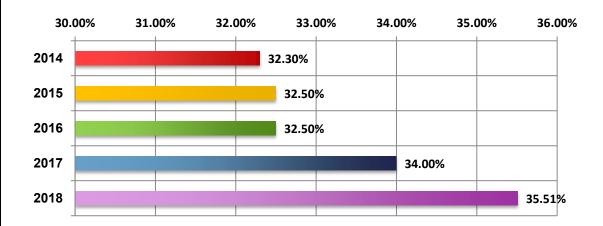
It is the ratio of the value-added contribution of small-scale industries to total value added of manufacturing industries %, usually small industries in the private sector.

### Trends of indicator : \_\_\_\_



It is notable the increase of the contribution of small industries to the total output of manufacturing industry due to the decline in the proportion of contribution of large enterprises because of the aggression that has been going on for more than four years, reaching 32.5%, 34% and 35.5% for years 2016, 2017 and 2018 respectively.

Figure (81): Proportion of small-scale industries in total industry value added 2014-2018



Source: The estimates of National Accounts- CSO.

### **Evaluating the indicator:**

Usually this type of industrial production abounds in less developed economies" as we have in Yemen and similar countries in the Arab world, the employment standard is the determinant of industry size, in small industry the size of employment is (1-5 workers) in the enterprise.

### **Future Prospects:**

The contribution of small industries to manufacturing industries by more than one third is of relative importance that should be taken into account in the preparation of future plans to support investment for this kind of industry.

### 9.4.1 CO2 emission

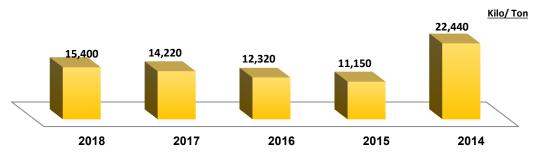
### **Definition of the Indicator:**

It is one of the greenhouse gases polluting the atmosphere resulting from the activities of different economic sectors (energy sector and electricity generation - agriculture sector - waste - industry sector ...) These gases pollute the air and lead to changes in climate. Carbon dioxide is the largest pollutant of air and atmosphere compared to other gases (CH4 and N2O), accounting for more than half of all greenhouse gas emissions. These emissions are usually the result of the use and burning of energy fuels from petroleum, diesel and natural gas.

### Trends of indicator:

The amount of carbon dioxide emissions in Yemen witnessed a decrease during the years after 2014, which was (22,440) k.t.in 2014. This amount continues to decrease to reach (15,400)k.t.in 2018, where this decrease reached (7,040) k.t. with (31.4%) for the year 2014. The decrease in carbon dioxide for the period (2015-2018) compared to 2014 is due to the decrease in the availability and use of energy fuels from petroleum, diesel and other and the increase in their prices due to the crisis, war and siege on Yemen, as well as the suspension of the gas stations of Marib that generate electricity. This in turn led to seeking for an alternative to get power through solar panel systems that do not pollute air. Also, this indicator is showing a slight gradual increase during the period (2015-2018) where the amount of this increase (1,170, 1,900, 1,180) for the three years (2016-2017-2018, respectively, due mainly to the increase in the use of personal (generators) and the use of firewood as fuel for cooking in homes and ovens (bakeries).

Figure (82): CO2 emission (K.T.) 2014-2018



Source / World Bank e-newsletter. And the International Energy Agency (IEA). The fourth state of the environment report for the Republic of Yemen 2018.

### **Evaluating the indicator:**

Yemen is one of the least emitters of carbon dioxide in Arab region and world. Comparing with some Arab countries in 2012, the volume of emissions in Yemen reached (17,420) k.t. while in Libya (35,300), Sudan (14,600), Morocco (51,800) and Oman (67,600), while it was very high in Iraq (114,667), and in Egypt (217,000). In comparison with the global volume, the emission of this gas from the total global CO2 emissions in 2012 in Yemen (0.06%), Syria (0.13%), Oman (0.21%), Qatar (0.24%), while this rate was high In Iraq (0.37%) and UAE (0.54%).

(Source: ESCWA Bulletin, 2014-2015). The international ranking and ranking of Yemen is (130) among the countries in the world in carbon dioxide emissions by (0.92) metric tons per capita. (World Bank Classification 2011).

### **Future Prospects:**

During the past period, the Yemeni government has started implementing three priority processes for the transition to green development. The three procedures have resulted in creating the two Marib stations to generate power by using natural gas as well as the prevalence of solar panel system, all these innervations led to a total annual reduction of (1,647) kilotons of CO2. (Fourth State of the Environment Report of the Republic of Yemen 2018).

We expect that the amount of carbon dioxide emissions will increase slightly in the coming years as a result of the continuation of the war and siege and the cessation of these clean and environmentally friendly technologies in two power generating stations, and then begin the gradual reduction of this gas emissions after the end of the war and the siege on Yemen and the use of energy, electricity, transport and industry in other sectors.

### 9.5.2 Researchers (in full-time equivalent) per million inhabitants

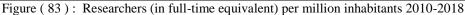
### **Definition of the Indicator:**

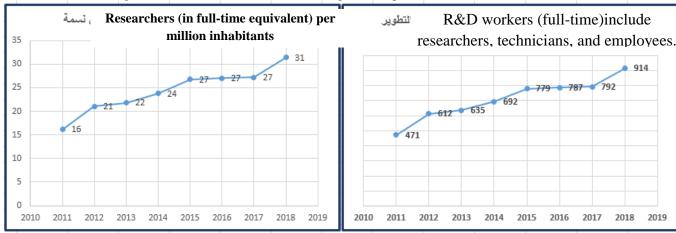
Is a direct measure of the number of R&D workers per million people. Method of calculation: is calculated by the number of researchers (full-time) per million inhabitants, that is, dividing the number of researchers by the population divided by one Million:

= <u>Number of researchers</u> = <u>Researchers per million</u> (Total of population / million

### Trends of indicator:

R&D workers (full-time)include researchers, technicians, and employees. For this reason, 2 figures were prepared, one for researchers only and the other for all workers, including researchers. The first figure shows that the number of active researchers per million inhabitants doubled between 2011 by 16 researchers per million and 2018 by 31 researchers per million. The total number of researchers (896) in 2018 for the entire population .The second figure shows that the number of researchers, technicians and employees working in the research and development field reached (914) worker per million of the population in 2018, while this number was (471) per million in 2011.





Source: Statistical Yearbook for the Years (2011-2017) Culture Bulletin Data include only the government sector.

### **Evaluating the indicator:**

The available data on the number of researchers per million in some Arab and foreign countries, we find that the number of researchers in Iraq was (63) per million in 2016, while in Yemen was (27) for the same year, as well as the number in Ethiopia was (45) researchers per million. However, the situation is different for The Sultanate of Oman where the number of researchers (242) per million, while in Egypt the number is higher and it was (680) researchers per million. The available data in Yemen may be inaccurate, but in any case the country suffers greatly in the low number of researchers in research and development. Therefore, if the investment in R&D is not improved from the GDP, and the number of R&D workers does not rise significantly, this will lose the strong engine of economic growth and sustainable development in the Republic of Yemen.

### **Future Prospects:**

Successive governments in Yemen have neglected the support of research and development, and workers in this field did not receive support by decision makers. The working conditions and status of scientists and researchers were still materially and morally poor. The expenditure on R&D is still in the bottom and its percentage of GDP is unworthiness. The question here is: Will the near future witness an awakening in scientific productivity in Yemen? The logical answer will be "no", as the security and economic deterioration is exacerbating the situation and diminishing the hope of enhancing scientific research and upgrading the technological capabilities of the industrial sectors in the Republic of Yemen, by 2030. Given the cumulative contraction in real GDP reached 45% during 2015-2019 and it lost 66 billion dollars .As a result, the possibility of encouraging innovation, increasing the number of R&D workers and public and private R&D spending is diminishing.

### 9.5.2.a Number of patents for residents per million people

### **Definition of the Indicator:**

A patent is a government grant to an inventor that specifically grants him/her the right to exclude the manufacture, use or sale of his idea, usually for a limited period, and the title of the patent is usually granted to a new and useful machine, industrial process, or manufactured product or for any significant and beneficial improvements to existing products, .Patents are also granted for medical products.

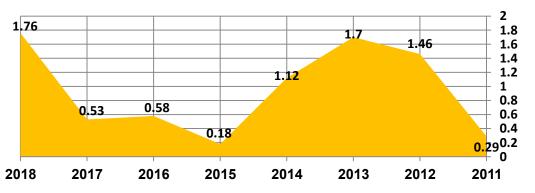
Number of patents

Total population / million

### **Trends of indicator:**

the number of patents for residents per million people in Yemen in 2016 was (16) patents, which is (0.58%), the index decreased for the following year 2017 to (15) patents by (0.53%).

Figure (84): Number of patents for residents per million people 2011-2018



Source: World Bank Group Reports (2011 - 2018).

### **Evaluating the indicator:**

From the available data on the number of patents per million people in some Arab countries, in Jordan was (22) patents in 2016, while in Yemen (16) for the same year. The situation is different for Sudan where the number of patents reached (284) as well as in Iraq we find that the number is higher and was (335) for the 2016. This indicator specifies that data on Yemen are very scarce and may be inaccurate due to the fact that the country is suffering of abnormal conditions and this is reflected in the lack of significant growth in the number of patents registered for residents in Yemen.

### **Future Prospects:**

As a result of our country's successive crises and problems, the patent index was negatively reflected and it was not registered with the government and the related authorities in this field because of the lack of suitable climate for such innovations and the lack of sponsorship and attention by the government agencies nor to give it the utmost importance once such new inventions serve society. All data on the number of inventions indicate that Yemen did not even catch up with economically similar countries. In the future we expect that the possibility of a rise in this indicator will diminish as a result of the mentioned above .



# 10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and urban status

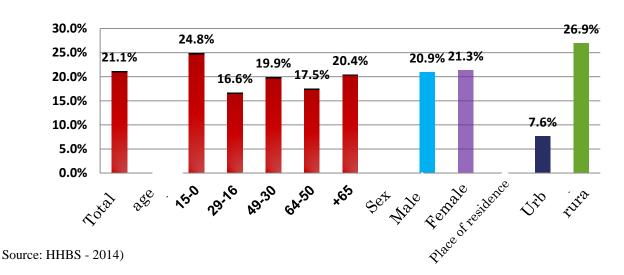
### **Definition of indicator:**

The proportion of the population living below 50% of the median income, which is a measure that reflects the existence of social justice in society, the lower the proportion of the population living below 50% of the median income, the better the social justice.

### Trends of indicator:

The results of 2014 household budget survey showed that the proportion of the population living on half of the income level was about 21% (only one fifth) of the total income, that means the remaining 79% of the population live on 50% of other sources of income, which is high compared to other countries. As shown in the figure below, the proportion of urban is better than that of the countryside.

Figure (85): Proportion of people living below 50 per cent of median income, by sex, age and urban status



### **Evaluating the indicator:**

By comparing the indicator with the rest of the world, the percentage in the countries (Turkey, Chile, Denmark, Mexico and South Africa) was (17.2%, 16.5%, 5.8%, 16.6% and 26.6% respectively). However, there is a correlation between the development of countries and the low indicator ratio.

Source; https://data.oecd.org/inequality/poverty-rate.htm

### **Future Prospects:**

Due to the lack of data to measure the progress of this indicator, whether negative or positive, as well as the conditions experienced by Yemen and the ongoing war, it is certain that there is a decrease in the median income, and therefore it is expected to increase the proportion of the population falling below the poverty line.



## 11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing

### **Definition of indicator:**

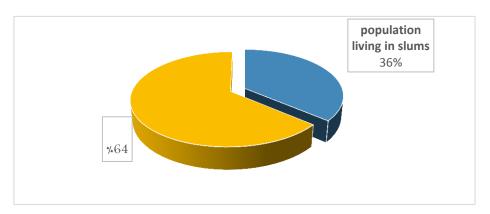
Slums are classified as "household deprivation" that absence any of the attributes listed below:

- 1. Cannot access to improved water services;
- 2. Cannot access to improved sanitation facilities;
- 3. Absence of adequate living space,
- 4. Lack of housing durability,
- 5. Noninsured housing ownership.

### Trends of indicator:

As a result of the situation in Yemen, there is undoubtedly a significant increase in the percentage of households who have been displaced to the main cities, especially to the outskirts of cities. This led them to live in inadequate housings due to that they cannot afford the costs of housing inside cities .In 2014 the Proportion was 36%.

Figure (86) Proportion of urban population living in slums, informal settlements or inadequate housing 2014



### **Evaluating the indicator:**

According to the results of Household Budget Survey 2014, and in terms of the availability of basic water, electricity and sanitation infrastructure, it showed that 36% of households living in slums, informal settlements, or inadequate housing which is one of high proportions, , and according to Land Portal website ,it was estimated in Yemen by (60.8%) compared to the following countries: Somalia (73.6%), Sudan (91.6%), Iraq (47.2%), and Syria (19.3%).

### **Future Prospects:**

The scale of this phenomenon has certainly increased, especially with displacement from confrontations areas to the outskirts of cities in Yemen as a result of the ongoing war, and since the UNs estimates for the number of people displaced by the aggression have been estimated at 3 million, it is expected that the proportion of households living in slums, informal settlements or inadequate housing, around 40% in 2018.

Source: https://data.landportal.info/book/sdgs/1111/sdgs-indicator-

## 11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated.

### **Definition of indicator:**

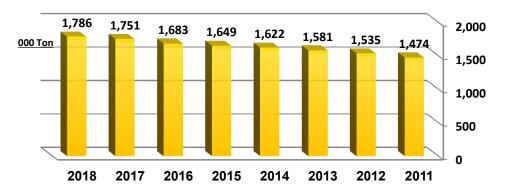
The total quantity of municipal solid waste (garbage) collected regularly for households and other service activities such as trade, street sweeping, etc.

### Trends of indicator:

The amount of solid waste (municipal waste) collected regularly at the level of the Republic increased annually during the period (2011-2018), where the amount of this annual increase (61, 46, 41, 27, 34, 68, 35) thousand tons for years (2012-2018) respectively.

These annual data for the amount of municipal solid waste collected represent only about 40% of the total amount of municipal solid waste estimated for the Republic, which is collected regularly and sent to official landfills for disposal by landfill. This is often the combined amount of urban households.

Figure (87): Quantity of solid waste regularly collected 2011-2018



Source: Statistical Year Book for several years -CSO-data from Ministry of Local Administration.

### **Evaluating the indicator:**

The amount of solid waste (municipal waste) collected regularly is still small quantity because only 40% of the total estimated solid waste collected on a regular basis. This quantity is needed to be increased according to the rise in the annual population growth rate and for the sake not to be these waste a source that threatens the health of the population, society and the environment in general.

### **Future Prospects:**

It is anticipated that the quantity of municipal solid waste collected regularly will not increase substantially over the next few years, due to a lack of funding for the municipal sector, insufficient equipment and machines to collect and maintain municipal waste, and insufficient, suitable and safe landfills for collection and disposal. Moreover, there is no policy to manage these wastes, the absence of proper treatment of wastes, the recycling and reuse of a large part of these wastes in various economic activities such as industry and others, and the weak investment of wastes within international standards. There is a clear lack of infrastructure for waste collection and treatment with high population growth rates and economic development activities.



13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication,

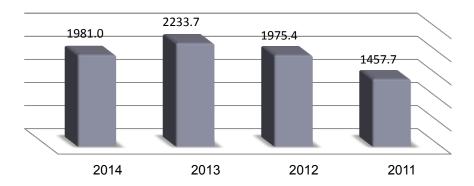
### **Definition of indicator:**

The amount of Ozone-Depleting Substances (ODS) consumed through use in different sectors of the country, measured by the depletion potential. This indicator is of great importance in monitoring the impact of developmental activity on the depletion of the ozone layer, which protects the planet from ultraviolet rays, in which its rise lead to several diseases, including skin diseases of humans.

### Trends of indicator

The ODS consumption Index increased significantly during the period (2011-2014). It was (1457.7) metric tons in 2011 to rise to (2233.7) metric tons in 2013, then decreased to (1981) metric tons in 2014. The average annual increase in the quantity consumed was (605.7) metric tons, with an average annual increase of (41.6%) during the period (2012-2014) compared to 2011. This increase is due to the increase in consumption of Freon / 22-CFC, which is used in the refrigeration and air conditioning sector.

Figure (88): Ozone-depleting substances 2011-2014 (Ton meteric)



Source: Statistical Year Book for several years -CSO-data from Ozone Unit (General Authority of Environment Protection)

### **Evaluating the indicator:**

The quantity of increase or decrease in consumption of ozone-depleting substances is due to the volume and quality of activities and sectors using these substances and to the size and awareness of population in regard to environmental issues . In addition to the size of the industrial sector and the efficiency of the measures taken to reduce the use of these materials. We note here that this remarkable increase in quantity is due to the increase in the consumption of the substance (Freon-22), which is used in a large amount in the maintenance of the process of refrigeration and air conditioning . The amount used of this substance was 90% of total annual consumption of ozone-depleting layer.

### **Future Prospects:**

. The consumption of ozone-depleting substances is expected to decrease in the long term, as the State adopts measures to limit the import and consumption of ozone-depleting substances, especially for Freon-22, which is widely used in the refrigeration and air-conditioning process, and to combat illegal trade and import of Ozone Depleting Substances. The State is also bound by the Montreal Protocol, which requires States to take measures to reduce and phase out controlled substances in accordance with the Montreal Protocol on Substances that Deplete the Ozone Layer.



### 14.5.1 Coverage of protected areas in relation to marine areas

### **Definition of indicator:**

This indicator measures the protected area of land ecosystems, inland water ecosystems and marine ecosystems as a percentage of the total area of these ecosystems (total area of the country). The protected area refers to areas that are fully or partially protected by at least 1,000 hectares, which are used as national parks, natural landmarks, nature reserves or wildlife reserves, and the protection of landscapes and seascapes.

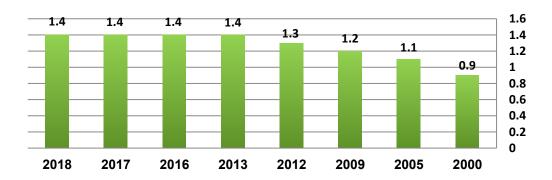
### **Trends of indicator:**



This indicator has witnessed a gradual increase during the period (2000-2013), the average increase of this rate (0.1%) except in 2005, an increase (0.2%) from 200, where the percentage of the protected areas out the total in the territory of Yemen (0.9, 1.1, 1.2, 1.3, 1.4)% for the years (2002, 2005, 2009, 2012, 2013), respectively. During this period, the State approved the declaration of nine areas as nature reserves with a total area of (627,904) hectares including two islands, forests, valleys and wetlands. The islands (Socotra Archipelago) had the largest area of the total area of these protected areas by(57.7%).

The period following 2013 (2014-2018) did not witness any increase in the area of protected areas because the state did not announce any new nature reserves during this period, so the percentage of this indicator during the last five years has remained stagnated by 1.4% %).

Figure (89): Proportion of protected area out of total area 2000-2018



Source: The fourth state of the environment report for the Republic of Yemen 2018.- General Authority of Environment Protection.

### **Evaluating the indicator:**

The areas of nature reserves are still small compared to our distinctive and diverse natural and environmental realities in Yemen. There are many outstanding areas with good, rare and diversity environmental aspects that can be deemed as nature reserves. The data for protected areas in this indicator are included only for protected areas officially declared by the State as protected areas.

### **Future Prospects:**

It is expected that the coming years will witness an upturn in the number of protected areas, due to the presence of a number of islands, coasts, highlands and natural lands that are rich in the diversity of wildlife such as diverse and rare animals and birds, . Yemen is rich in plant species that represent more than (2836) plant species. They are important natural habitats for the reproduction, harboring and feeding of large numbers of wildlife such as animals, birds, insects, reptiles and amphibians, in addition to the presence of many diverse fish as well as weeds and other marine life. There are approximately (36) natural sites with high environmental characteristics and qualities that qualify them to be nature reserves.

### 14.6.1.a Annual fishing

### **Definition of indicator:**

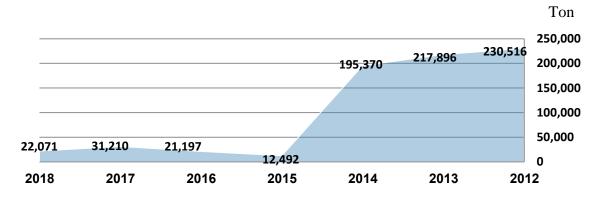
### The total annual amount of major fish and marine organisms if available, or according to the highest percentage of quantity per year within a time series (as the basis for an average of five years).

### Trends of indicator:

According to data on annual fishing quantity, we find a change in the direction of this indicator during (2012-2018), the highest production quantity in 2012 was (230,516) tons, despite the continuous rise in demand for fish as an important source of nutrition for the community members in Yemen. We find that the annual fishing has gradually declined to (12,492) tons in 2015, which is a significant reduction by (218,024) tons to 2012, with a decrease by(94.6%). Then, it started to rise in 2016 and 2017 to reach (31,210) tons in 2017, an increase of (18,718) tons compared to 2015 by an increase of (150%), then production decreased in 2018 to reach (22,071) tons, with a fall of (9,139) tons, by 29,3% as drop compared to 2017. The decrease in fishing production for period (2015-2018) was due to the war on Yemen, in addition to the lack of data for some coastal governorates of the Republic.

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Figure (90): Annual fishing 2012-2018 (Tons)



Source: Statistical Year Book for several years -CSO-data from Ministry of Fishing Resources .

### **Evaluating the indicator:**

Despite the significant decline in the annual fishing production during the period (2015-2018), which is due to the presence of abnormal conditions and causes (war and siege, and the lack of some data), the quantity of fish produced is still insufficient to meet the needs of the population. The main meal for the citizens (shortage of quantity and high prices), so there is a food gap in this aspect. We point out that the production and fishing is carried out by the state in addition to the process of fishing by small fishermen in the Republic.

### **Future Prospects:**

It is expected that the annual amount of fishing will increase gradually over the coming years, after the end of the causes that have negatively affected the sector as a result of the war and siege on Yemen. The State shall endeavor to develop the fisheries with the establishment of controls and procedures for the process of fishing, the use of technology in fishing, and rise private investment in fishery sector. Yemen has a long coastline on the Red Sea, the Gulf of Aden and the Arabian Sea and has large fish stock.



### 15.3.1 Proportion of land that is degraded over total land area

### **Definition of indicator:**

The total area of land affected by desertification and its percentage to the total land area of the state. This indicator measures the percentage of land corrupted by desertification of the total state land. It gives us an assessment of the extent of degradation of these decertified lands in all arid, semi-arid and dry sites within the state borders.

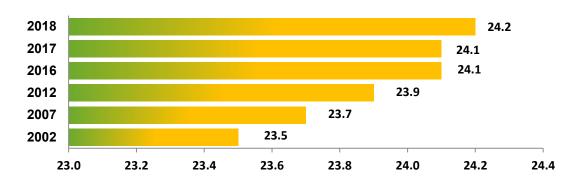
### **Trends of indicator:**



This indicator shows that there is a relative increase in the land affected by desertification to the total land area of the Republic during period (2002-2018), where the proportion of land deserted in 2002 (23.5%)} which is (10.7%) desert lands. (12.8) sand dunes lands.

The estimated rate of deserted lands was (23.7%, 23.9%, 24.1%, 24.1%, 24.2%) for the years (2007, 2012, 2016, 2017, 2018) respectively. The estimated increase during this period was (0.2%) which is also an estimated increase for every five years (due to lack of data on the area of degraded land for desertification for period after 2002).

Figure (91): Proportion of land affected by desertification to the total land 2002-2018



Source: Statistical YearBook 2017 – CSO-data from General authority for agricultural researches and gaudiness (Land Desertification Project 20020- With preliminary estimates of (0.2%) for every 5 years 2007.

### **Evaluating the indicator:**

Yemen has a geographical area of about (45.5) million hectares, which is sprawling and located in different climatic variables distributed on mountains, plains, valleys and deserts, including locations in coastal areas, including sand dunes and others. There is an annual increase in land degradation (desertification) as a result of several factors including soil erosion and erosion due to wind, as well as the lack of sufficient water for agricultural irrigation and depletion (due to low annual rainfall, lack of groundwater), especially in arid, semi-arid and arid areas, in addition to the misuse of land. Land and unsafe use of fertilizers and agricultural pesticides, as well as logging and felling for use as firewood for fuel and construction.

The rise in land desertification, in addition to the lack of proper and sustainable land management, means that the future food security of the population is not guaranteed, as well as environmental problems related to climate change, air pollution, a decrease in vegetation, etc. This in turn negatively affects humans, animals and the environment in general.

### **Future Prospects:**

It is expected that the land degradation affected by desertification will increase in the coming years due to the maintain and sustain the causes of this degradation. Therefore, with the help of society, the state should develop policies and procedures that limit the further deterioration of this degradation while allocating and increasing financial investment. The State should undertake studies to assess, know and monitor soil and land degradation using scientific methods such as the use of remote sensing techniques and geographic information systems (GIS) to build a useful national database



### 16.1.1 Number of victims of intentional homicide per 100,000 population, by sex

### **Definition of indicator:**

It is defined as the number of male and female murder victims (per 100,000) attributed to the total population.

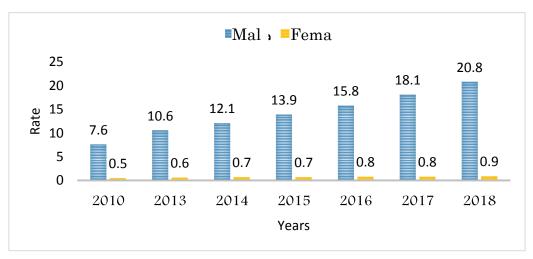
### **Trends of indicator:**



It is noteworthy that the rate of males murdered has increased from 7.6% in 2010 to double the rate to 15.8% in 2016 and to 20.8% in 2018 .The rate of females murdered has increased from 0.5% in 2010 to 0.8% in 2016, and then increased slightly in 2018 Up to 0.9. This means that for every 100,000 men, 21 males are killed and only about one in 100,000 females is killed.

Source: Statistical Year Book 2017 -CSO.

Figure ( 92 ) : Proportion of homicide victims by sex 2010-2018



### **Evaluating the indicator:**

This indicator has witnessed an increase for males and females due to the current conditions perceived by the country as a result of the war and the suffering of individuals from material and psychological pressures. When compared with Arab countries, this ratio remains reasonable.

### **Future Prospects:**

The rate of victims murder is anticipated to decrease gradually after the war, once the security, safety and the rule of law is established.

### 16.1.2.a Number of IDPs forced to abandon their homes or residences

### **Definition of indicator:**

Displacement is defined as (the movement of an individual or group from one place to another within the borders of the state. Displacement is carried out against the will of the displaced due to a life threatening impact such as famine ,war, drought desertification or other disasters that force the displaced to leave home and go to another location in order to escape from that circumstances. IDPs are also defined as (persons or groups of people who have been forced to leave their homes or places of habitual residence suddenly or unforeseen because of armed conflict, internal conflict, systematic violations of human rights, natural or man-made disasters and not cross the borders of any internationally recognized country).

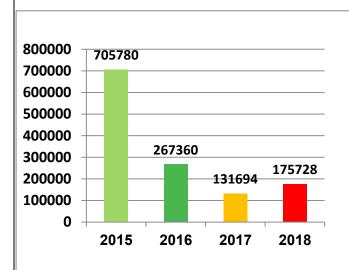
### **Trends of indicator:**

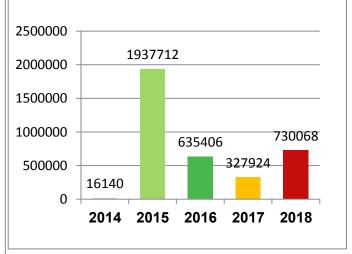


The actual displacement began in Yemen due to the war in Yemen in March 2015, the year in which half of the total displaced people. The displacement lasted for the next two years but less frequently. In 2018, it rose to 684,948 due to the fighting in the west coast. The total number of displaced since the beginning of the war until March 2019 was (3,647.250).

During the same period, 1,280,562 IDPs returned to where they lived before the displacement.

Figure (93&94): Number of IDPs and Returnees 2014-2018





### **Evaluating the indicator:**

Comparing the situation similar to Yemen in the circumstances of war and armed conflict, according to the reports of the United Nations High Commissioner for Refugees (UNHCR), Yemen ranked fifth in the number of displaced people at the end of 2017 and ranked seventh globally at the end of 2018 after Nigeria and before Afghanistan, but considering the figures recorded by the International Organization for Migration (IOM) Yemen is supposed to occupy the fourth place globally in the number of displaced by the end of 2018.

Sources - IOM database.

### **Future Prospects:**

The number of IDPs is affected by the extent and intensity of the war, as well as the duration of its continuation in a geographical area, in addition to disasters and the locations of their occurrence, all of which are difficult factors to predict, but if the war stops, the majority of the displaced are expected to return to their places of residence before displacement as a matter of urgency. This is anticipated by the number of returnees during the period from the beginning of the war to the present despite the fact that the war does not end.

# 16.2.1 Proportion of children aged 1–17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month

### **Definition of indicator:**

It is the proportion of children aged 1-17 years who have experienced any physical and / or psychological punishment by caregivers in the past month .

It is measured by taken data on the proportion of children aged 1-14 years who have been subjected to any physical punishment and / or psychological abuse by caregivers in the past month.

Number of children aged 1-14 years subjected to any physical punishment and / or psychological abuse by caregivers in the past month \*100

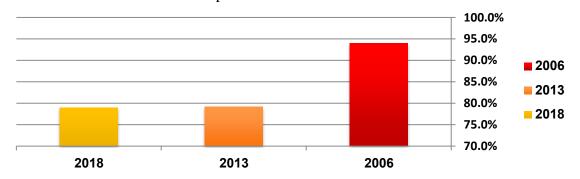
The total number of children aged 1-14 years multiplied by population

### **Trends of indicator:**



Many children of Yemen, like all children of the world, from 1-17 years of age are subjected to various types of punishment such as corporal, verbal and / or psychological and / or any other punishment. And punishment may take many forms, the most important of which is mistreatment at the hands of their parents and their caregivers. Where indicators indicate high rates of children who were subjected to physical and psychological attacks, in the year 2006 AD and from the results of the (MICS 2006) survey, the percentage of children who were exposed to any physical or psychological punishment (94%), and this percentage decreased in 2013 (DHS 2013) to reach (79.2%), and according to UNICEF estimates in its report issued in 2019, the percentage of children who were subjected to any physical or psychological punishment in 2018 was (79%)

Figure (95):Proportion of children aged 1-17 who have experienced any physical and / or psychological punishment 2006-2018



### Sources:

- 1- MICS 2006, Ministry of Health and Population, Yemen, UNICEF.
- 2 National Health Demographic Survey (DHS) 2013 (Ministry of Health and Population, CSO Yemen), The Arab Program for Family Health in Cairo.
- 3- The World Report: The State of the World's Children 2019 UNICEF.

### **Evaluating the indicator:**

In the comparison of Yemen's indicators with other Arab countries in the proportion of children who have been subjected to any physical or psychological punishment by caregivers, we find that they are very close to Lebanon 82%, Iraq 81%, Djibouti 72%, while the prevalence of this violence is high among other countries such as Tunisia 93%, Egypt 93%, Morocco 91%, Jordan 90%, Syria 89%. Estimates from a study by several international organizations put the number of children in the world who have experienced physical, sexual or psychological violence at one billion.

### **Future Prospects:**

The percentage of children who are subjected to any physical or psychological punishment is expected to rise due to the continuation of the war and siege on Yemeni people and its catastrophic effects on all economic, social, health and psychological aspects of the Yemeni families. The increase of poverty , the hard living conditions that the household's endure and the daily forms of pressures all have health and psychological impacts on them and therefore they tend to use of various forms of domestic violence towards their children such as verbal, physical and psychological violence and other forms of violence .

### 16.6.1 Primary government expenditures

### **Definition of indicator:**

# It is an instrument of fiscal policy where the State is spending to achieve its economic and social goals. It includes salaries ,wages ,development projects and spending on infrastructure such as roads, bridges, water and electricity. Domestic spending accounts for the largest proportion of government spending, through construction and public consumption, as well as supporting government contributions to local companies and supporting some social and economic sectors.

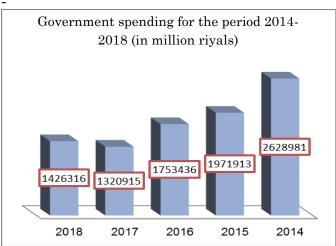
### **Trends of indicator:**



Government spending decreased from 2 trillion and 628 billion 981 million Yemeni riyals in 2014 to 1 trillion and 971 billion and 913 million riyals in 2015, a decrease of 25% from 2014, bringing the decline in expenditure to 1 trillion and 426 billion and 316 In 2018, a decrease of 46%.

Figure (96): Total government spending 2014-2018





Source: Report on the effects of aggression on Yemeni Economy 2019 - CSO

### **Evaluating the indicator:**

At first sight, the in government spending in Yemen has decreased dramatically and frightening compared to countries similar to the situation of Yemen, such as Syria, Libya and other developing countries

### **Future Prospects:**

Through the above indicators, it is clear that the decline in government spending will continue for the coming years due to several factors, the most important of which is the stopping of oil and derivatives exports, which represents more than 80% of Yemen's income.

Hence, the indicators assert Yemen's ranking in the area of government spending to approach weak countries.

# 16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age

### **Definition of indicator:**

The percentage of children under five years of age whose birth registered in the civil authority out of the total number of children in the same age group multiplied by 100.

Data for calculating this indicator can also be obtained from sample surveys to estimate the percentage of completion of birth registration, as some births may never be recorded or delayed for several reasons, including the death of the newborn before registration or when issuing a birth certificate for the purpose of registering the child to enroll in education as well as the low awareness of the Yemeni citizen of the importance of recording vital events, in addition to the weakness of the civil registry system in follow-up and recordkeeping.

### **Trends of indicator:**

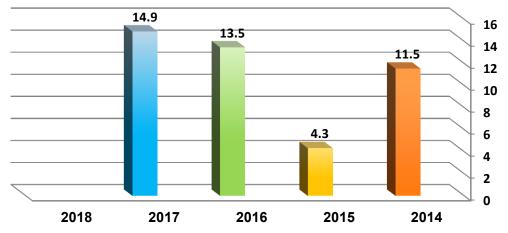


This indicator has perceived an increase in the number of children under the age of five who were registered in the civil registry in Yemen in 2017 by (12%) compared to 2016, in which the proportion of the registered births during the years 2016 and 2017 reached 13.4 and 14.9 respectively. The percentage in 2016 was increased compared to 2015 by a large percentage (216%) due to the ongoing war on Yemen that caused the suspension of many of the State service sector in 2015 where the proportion of registered was (4.3%).

When compared to the years 2014 and 2016, the difference between them is an increase of (20%). According to the final report of the demographic health survey 2013, about one third of children under the age of five have been registered in the civil authority, where the proportion of registrars increases with the age of the child (2-4) years .It was also noted that there were no clear variances in registration between both males and females.

Source: Statistics Yearbook 2017.

Figure (97) Proportion of children( under 5 ) of age whose births have been registered with a civil authority 2014-2018



Source: Statistical year book 2017-CSO.

### **Evaluating the indicator:**

The proportion of children under five registered in the civil record is low compared to many countries in Arab region similar to the social conditions and the unstable security situation such as Iraq. Where the proportion of children under five registered in the civil record was 99.2compared to Yemen in 2011, which was 6.2%.

Source: Iraq Sustainable Development Report 2017.

### **Future Prospects:**

Working to the provision data to calculate this indicator including for all births and in a timely manner, through the development of a strategy for the Civil Department in coordination with the relevant bodies to ensure comprehensive coverage of the registration of new births and available to various groups of society.

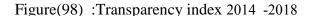
### **Transparency index**

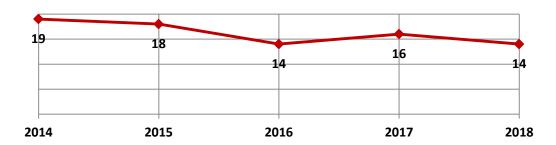
### **Definition of indicator:**

The Corruption Index is an index published by Transparency International Organization Corruption Index ranks countries and territories on the basis of the corruption of their public sector. As determined by expert assessments and opinion polls as "abuse of public power for private benefit", the score of a country or region indicates the perceived level of public sector corruption on a scale of 0 (very corrupt) to 100 (very clean) and because of the nature of this indicator, it is impossible to measure corruption accurately. But there are estimates available and published by Transparency International for a number of assessments, surveys and indicators that measure corruption: the most important are the Consumer Price Index (CPI), the global public opinion poll on corruption and the payment of bribes.

### **Trends of indicator:** •••

Yemen scored 14 out of 100 on Transparency International's Corruption Perceptions Index 2018. The average corruption index in Yemen was 19 points in 2014 and the lowest level reached 14 points in 2018 and 2016.





### Sources:

- Transparency International reports for the years (2011 2018).
- World Bank Group Reports
- Economic and Social Update for Yemen issued by the Ministry of Planning and International Cooperation.

### **Evaluating the indicator:**

We note that the index recorded a significant decline as the CPI currently ranks 176 countries "on a scale from 100 (very clean) to 0 (very corrupt)". Denmark and New Zealand are seen as the least corrupt countries in the world, ranking first among international financial transparency, while Somalia is the most corrupt country in the world, ranking 9-10 out of 100 since 2017 and compared to many countries. Our country ranked the lowest, with the value of this index in Iraq reached 18, while Egypt ranked 35 and Djibouti ranked 31 in 2018.

### **Future Prospects:**

This indicator is expected to remain as it is because corruption is the result of entrenched dysfunctional institutions in a country, changes at the country level will be slow to emerge. It will take some time to fight corruption.

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### **Business Environment Index**

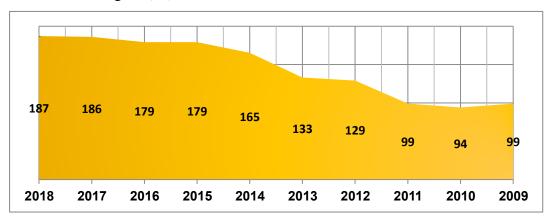
### **Definition of indicator:**

It means the easiness of doing business, where economies are ranked from 1 to 190, with the first rank being the best. High ranking (low numerical rank) considers that the regulatory environment helps to run the business and is published by the World Bank. It is an aggregate figure with different criteria that determine the ease of doing business in a country. The indicators or criteria that are part of the "ease of doing business" include: 1. Starting an investment activity 2. Dealing with building permits 3. Access to electricity 4. Registering property 5. Obtaining credit 6. Protecting investors 7. Paying taxes 8. Trade Outside the borders 9 - Execution of contracts 10 - Rescue from bankruptcy where the distance to the border class is calculated and all grades are grouped. The overall result becomes the ease of doing business index

### Trends of indicator:

Yemen recorded a decline in the ease of doing business index. It is noteworthy that Yemen ranked 165 in 2014 but Yemen's rank worsened to 187 in 2018, out of 190 economies according to the latest World Bank rankings.





Source: World Bank (World Bank Annual Economic Assessments)

### **Evaluating the indicator:**

We note that the indicator recorded a significant decline, which means complex administrative procedures for investors and companies, where the ease of doing business ranks countries against each other based on how the regulatory environment helps protect and facilitate business. We find that our country ranked lower compared to many countries, that we get the value of this index in Iraq was 171, Egypt ranked 120 and Djibouti 99 out of 190 economies in ease of doing business.

### **Future Prospects:**

This indicator reveals the need for urgent reforms to all the data that make up the index, especially data on access to electricity. To do so , the provision of security and stability as well as the adoption of regulations and principles are essential to secure high rates in Business Environment Index

# 17 PARTNERSHIPS FOR THE GOALS

### 17.1.1 Total government revenue as a proportion of GDP.

### **Definition of indicator:**

Reflects the net value of the public treasury resulting from transactions imposed by the government and has four key sources (taxes - social contributions - grants - other miscellaneous income) attributed to current GDP.

Source: Government Financial Guide – IMF.

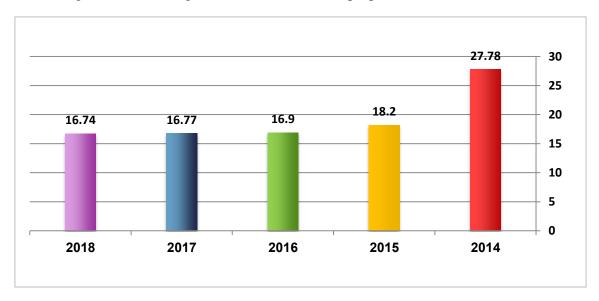
### **Trends of indicator:**



During the period 2016-2018, the average government revenues in total represented about (17%) of the gross domestic product, which are tax revenues and current non-tax revenues, while no capital revenues or revenues from grants and aids were recorded, which represented (16.90%), (16.77%). and (16.74%) of GDP during 2016, 2017 and 2018, respectively.

Source: National Accounts Data 2018 - CSO

Figure(100): Total government revenue as a proportion of GDP2014 -2018



### **Evaluating the indicator:**

Government revenues without grants and aids represented (16.90%) of GDP during 2016 compared by (%13.94) of the least developing countries group.

Source: World Bank page

https://data.albankaldawli.org/ indicator/GC.REV.XGRT.GD.ZS?view=chart

### **Future Prospects:**

Government revenues are anticipated to continue to decline if oil and gas are not re-exported, on which the state budget depends by 80%. Despite the effectiveness of tax collecting, it will not be sufficient to fill the deficit in the state budget

# 17.1.2 Proportion of domestic budget funded by domestic taxes

# **Definition of indicator:**

The total value of the public treasury as a result of transactions resulting from the taxation of various businesses and activities. Its key items are (taxes on income, profits and capital gains - taxes on total salaries, wages and manpower - taxes on property - taxes on goods and services - taxes on trade and international transactions - Other taxes)

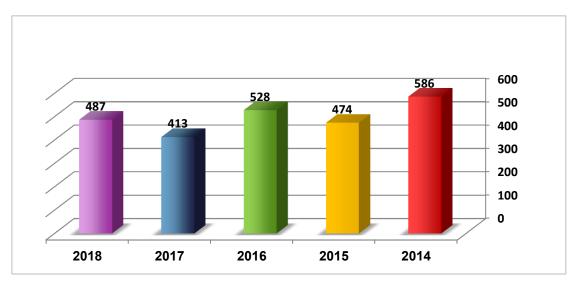
Source: Government Financial Guide - IMF

# **Trends of indicator:**

During 2016-2018, taxes were the main source of government revenues, where it recorded (528) billion riyals in 2016, then decreased slightly to (413) billion riyals in 2017, and (487) billion riyals in 2018.

Source: National Accounts Data 2018 - CSO

Figure (101): Proportion of domestic budget funded by domestic taxes 2014-2018 (Billion YR)



Source: Government Financial Bulliten – G. Management of National Accounts –CSO, 2018.

#### **Evaluating the indicator:**

Tax revenue fell from \$ 530 million in 2016 to \$ 211 million in 2017 compared to an increase in Libya from \$ 565 million in 2016 to \$ 724 million in 2017.

Source: Integrated Arab Economic Report (Arab League) 2016-2017 – Annex (6/3)

#### **Future Prospects:**

Tax revenues are expected to improve due to the rise in tax gathering coverage in an attempt to reduce the gap, especially with the absence of capital revenues, grants and aid.

# 17.3.2 Volume of remittance (in United States dollars) as a proportion of total GDP

# **Definition of indicator:**

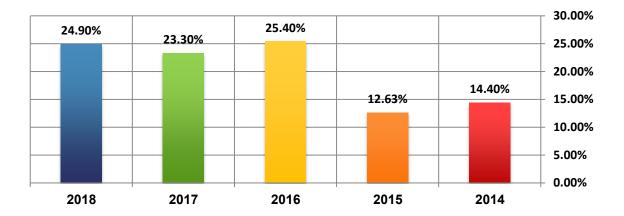
It is the sum of cash transfers divided by GDP and it is remittances that sent by Yemeni expatriates from abroad to Yemen (which is considered an important source of providing foreign cash to the national economy, and contributes to the stability of the country's economy). In addition to humanitarian assistances from International organizations and donor countries.

#### **Trends of indicator:**



The cash transfer indicator is changeable in its contribution to GDP in 2016, where it reached 25.4%, and declined slightly in the following year to reach 23.3 %. In 2018, it increased marginally to 24.9% of the GDP in which humanitarian supports was 2.4 billion dollars for the same year.

Figure (102): Volume of remittance (in United States dollars) as a proportion of total GDP 2014-2018



#### Sources:

- Balance of payments (Central Bank of Yemen).
- Estimates of National Account-CSO).
- Integrated Arab Economic Report (Arab League)-2016-2017

#### **Evaluating the indicator:**

With regard to current transfers, which represent the remittances of workers and official aid the most important components. In 2017 a decrease in the deficit recorded in the Arab countries by about 10.2% to about \$75.1 billion compared with about \$83.7 billion represents a deficit achieved during the previous year as a result of the contraction of the total deficit achieved by the GCC countries as a group of \$3.8 billion, or by 3.0%.

#### **Future Prospects:**

The stabilization of the expatriates' situations abroad as well as increased of humanitarian assistances by donor countries and international organizations will growth the volume of remittances to GDP.

# 17.8.1 Proportion of individuals using the Internet per 100 of population

#### **Definition of indicator:**

The number of Internet users nationwide divided by the population multiplied by 100.

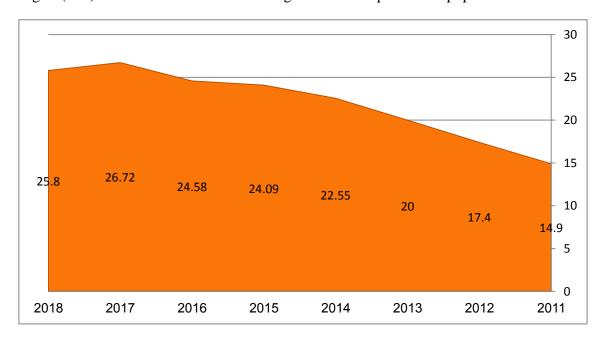
This indicator is a measure of the ability of access into world net of information (Internet) and to get information and learning opportunities for community members.

#### **Trends of indicator:**

 $\Rightarrow$ 

The Internet prevalence rate among the population has seen a gradual increase during the period (2011 - 2017) getting (14.9) in (2011) to reach (26.72) users per (100) members of the population in 2017, in 2018, it decrease (25.8) users per (100) members of the population.

Figure(103): Number of individuals using the Internet per 100 of population 2011-2018



#### Sources:

- Human Development Report 2018- United Nations.
- Regional Preparatory Meeting for Arab States (RPM-ARB) for WTDC-2017, AL-Khartoum, Sudan.
- Telecommunications Regulatory Authority -Sudan -Annual Report 2017.

## **Evaluating the indicator:**

The prevalence of Internet usage among the population in the Republic of Yemen was (25.8) per 100 population in 2018, which is almost the lowest compared to middle-income countries, for example in Sudan , it was (70.1) and in Djibouti (36.6), which is lower than the Global rate , which scored (72.9%).

## **Future Prospects:**

This indicator is expected to remain the same or witness limited improvement due to relative stability in economic and political conditions.

# Percentage of exports and imports of GDP

# **Definition of indicator:**

It is total exports of goods and services plus total imports of goods and services divided by GDP at market price multiplied by 100.

This indicator is a measure of the degree of openness of the national economy to the global economy or the so-called degree of economic exposure.

#### Trends of indicator:

The percentage of exports and imports of GDP (the degree of trade openness) in the Republic of Yemen observed a slightly increase in 2017, recording (46.37%), while it did not exceed (41.39%) in 2016, and then retreated slightly in 2018, achieving (46.17%). ) in export and import performance of goods and services during the years mentioned.

Source: Foreign Trade Data + GDP Bulletin December 2018 - CSO.

72.15 46.17 46.37 41.39 35.65 40 20 20 0

Figure (104): Percentage of exports and imports of GDP 2014-2018

# **Evaluating the indicator:**

The rate of trade openness in Yemen was 46.17% in 2018, but still below the level compared to the MENA region for low-income countries, which reached 54.05% during the same year, as well as the group of countries with fragile and conflict-affected economies, which reached 51.08%.

Source: World Bank Indicators page

 $\underline{https://data.albankaldawli.org/indicator/}$ 

# **Future Prospects:**

This indicator (the degree of trade openness) is expected to continue to rise in the future as the economic policy of the Yemeni government is considered to be open to the global economy, in addition to the dependence of the national market on imports from abroad to cover most of the needs of the community.

# Gross capital formation as a percentage of GDP

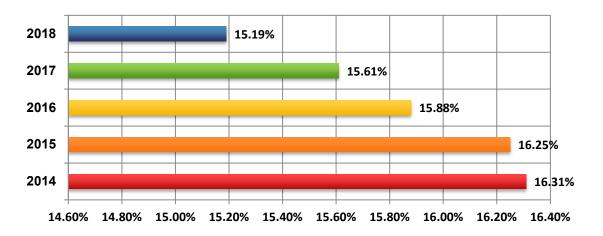
# **Definition of indicator:**

Capital formation is the total capital formation divided by GDP, and it is the capital additions achieved during the comparative year. It is deemed as one of the indicator that measure the range the economic growth.

# **Trends of indicator:** •••

the contribution rate of this indicator is almost constant during the three years, an average of 15.56%, and this is a relative stability of investment despite the harsh conditions experienced by the country.

Figure (105): Gross capital formation as a percentage of GDP 2014-2018



#### Sources:

- Estimates of National Accounts (CSO).
- Integrated Arab Economic Report (Arab League)-2016-2017.

#### **Evaluating the indicator:**

Poor Arab countries still facing challenges affecting economic and investment growth, including weak infrastructure, low investment rates, high levels of indebtedness and unemployment. In light of that, the Arab countries as a group recorded a decline in the growth rate of GDP at constant prices in 2017, to reach 1.0 % compared to 2.7% in 2016.

# **Future Prospects:**

This stability of this indicator is expected to continue in the contribution to GDP at least in the next few years.

## **Competitiveness Index**

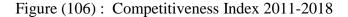
## <u>Definition of indicator:</u>

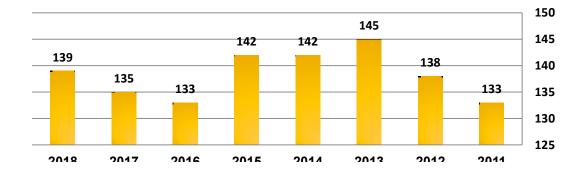
composite index that the measures competitiveness of countries through (12)procedures, each of which includes a number of sub-indicators, including: institutions. infrastructure, macroeconomics, health and basic education, higher education and training, market effectiveness, labor market efficiency, development of financial markets, readiness Technology, market size, business development and innovation.

#### Trends of indicator:

During the period 2016-2018, this indicator achieved successive negative readings after it had achieved some improvement in 2016, in which Yemen reached the rank (133) in the international competitiveness index, but it soon returned to record negative values, placing Yemen in the ranking (135) and (139) during 2017 and 2018 respectively according to the classification of this indicator.

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#### Sources:

- Transparency International reports for the years (2011 2018).
- World Bank Group Reports .
- Economic and Social Newsletter for Yemen issued by the Ministry of Planning and International Cooperation
- Arab Competitiveness Reports issued by the Arab Planning Institute in Kuwait.

# **Evaluating the indicator:**

Yemen retreated to rank number (139) in 2018, while it ranked No. (133) in 2016, compared to Mauritania (138) in 2018 and Jordan (64) in 2018.

#### **Future Prospects:**

For the time being, the index will remain as it is without any significant progress, but when the war ends, there will certainly be interest in developing the country's infrastructure, developing the Yemeni economy, not allowing its instability, raising the levels of education, qualification and training for all Yemeni people and developing and entrepreneurship within the country.

# 5 SECTION V MAJOR INDICATOR AND DATA GAPS FOR THE SDGS

Indicators not available in the report according to the 17 SDGs and treatment mechanisms

	Goal/ Indicator	Treatment Mechanisms
1	End poverty in all its forms everywhere	
1.1.3	Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable	Implementing surveys by sample on social protection
1.1.4	Proportion of population living in households with access to basic services	Implementing surveys by sample on households
1.a.1	Proportion of domestically generated resources allocated by the government directly to poverty reduction programs .	Implementing specialized surveys by sample on poverty
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	
2.3.3	Average income of small-scale food producers, by sex .	Implementing specialized surveys by sample on food security
2.a.2	Total official flows (official development assistance plus other official flows) to the agriculture sector	Implementing surveys on agriculture by sample
2.c.1	Indicator of food price anomalies	Implementing surveys on prices by sample
3	Ensure healthy lives and promote well-being for all at all ages	
3.3.1	3.1.1 Maternal mortality ratio  YEMEN SDGS INDICATORS REPORT 2016-2018 - (CSO)	Implementing surveys on Maternal mortality by sample
3.3.4	Hepatitis B incidence per 100,000 population	Implementing Health surveys in sample

3.8.2	Proportion of population with large household expenditures on health as a share of total household expenditure or income	
3.b.2	Total net official development assistance to medical research and basic health sectors	
3.b.3	Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis	
3.c .1	Health worker density and distribution .	
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	
4.4.1	Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	Implementing educational surveys in
4.6.1	Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	sample
4.a.1	4.a.1 Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic hand washing facilities (as per the WASH indicator definitions)	
4.c.1	Proportion of teachers in (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) preservice or in-service required for teaching at the relevant level in a given country	
5	Achieve gender equality and empower all women and girls	
5.5.2	Proportion of women in managerial positions	Improving the role of data sources (administrative records)
5.c.1	Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment	Capacity building
6	Ensure availability and sustainable management of water and sanitation for all	
6.a.1	Amount of water- and sanitation-related official development assistance that is part of a government-	Improving the role of

	coordinated spending plan	data sources
		(administrative records)
7	Ensure access to affordable, reliable, sustainable and modern energy for all	Tecords)
7.2.1	Renewable energy share in the total final energy consumption	Carry out energy survey in sample
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	
8.7.1	Proportion and number of children aged 5–17 years engaged in child labor, by sex and age.	Implementing social and unemployment
8.b.1	Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy	surveys in sample
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	
9.1.1	Proportion of the rural population who live within 2 km of an all-season road	Carrying out transportation surveys in sample
9.3.2	Proportion of small-scale industries with a loan or line of credit	Carrying out financial
9.5.1	Research and development expenditure as a proportion of GDP	surveys of the sample
10	Reduce inequality within and among countries	
10.1.1	Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	Carrying out household Expenditure surveys in sample
11	Make cities and human settlements inclusive, safe, resilient and sustainable	
11.1.1	Proportion of urban population living in slums, informal settlements or inadequate housing	Implementing cities and human settlements

		surveys in sample
11.3.1	Datic of land consumption note to manufaction answer note	, ,
11.5.1	Ratio of land consumption rate to population growth rate	Implementing
		agricultural surveys in
		sample
11.3.2	Proportion of cities with a direct participation structure of civil society in urban planning and management	Implementing urban
	that operate regularly and democratically	city surveys
11.5.1	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000	Implementing damage
	population	survey
12	Ensure sustainable consumption and production patterns	
12.4.2	Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment	Environmental
12.5.1	National recycling rate, tons of material recycled	surveys in the sample
13	Take urgent action to combat climate change and its impacts	
13.3.1	Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into	Capacity building
	primary, secondary and tertiary curricula.	
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	
14.7.1	Sustainable fisheries as a proportion of GDP in developing States, least developed countries and all countries	Implementing
	•	agricultural surveys in
		sample
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, comb	at desertification, and
	halt and reverse land degradation and halt biodiversity loss	
15.1.1	Forest area as a proportion of total land area.	Agricultural surveys
		in sample
		1
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and	l build effective,
	accountable and inclusive institutions at all levels	,
16.7.1	Proportions of positions in national and local institutions, including (a) the legislatures; (b) the public service;	Improving the role of
	and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population	data sources

	groups .	(administrative
		records)
16.9.1	Proportion of children under 5 years of age whose births have been registered with a civil authority, by age	Administrative
		Records
17	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	
17.18.2	Number of countries that have national statistical legislation that complies with the Fundamental Principles of	Capacity building
	Official Statistics.	
17.18.3	Number of countries with a national statistical plan that is fully funded and under implementation, by source	
	of funding .	
17.19.1	Dollar value of all resources made available to strengthen statistical capacity in developing countries	
17.19.2	Proportion of countries that (a) have conducted at least one population and housing census in the last 10	
	years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration.	

# **6** THE CONCLUSION

The indicators of the sustainable development goals included in this report clarified the major challenges facing the Republic of Yemen in field of monitoring and evaluation of the progress made in SDGs due to the war, aggression and blockade that the country has been going through since 2015.

Despite this, this report contains many indicators that provide a clear portrait of the extent of the regression in all (social, economic, environmental) levels as a natural result of what Yemen suffers from.

The report provides monitoring and assessment of the 17 indicators SDGs in accordance with the SDGs global plan 2016-2030, which was agreed globally to meet the critical challenges of our time and the coming ages, as the report included what is available from the indicators whose data were obtained in the current situations.

The most important indicators of this report showed that the percentage of the population below the national poverty line increased to more than 77% in 2018, the high prevalence of acute food insecurity to 67% in 2018, the high rate of stunting prevalence among children to 46.4, and the high mortality rate of children under 5 years to 55%. On the other hand, the percentage of population receiving a safe drinking water decreased to 39.7 and the annual growth rate of the gross domestic product (GDP) decreased to -5.6.

The preparation of this report comes to keep pace with the global path and to meet the requirements of the international community from all countries to monitor the progress made in SDGs 2016-2030 and as a result of the partnership and cooperation between the CSO and the United Nations Population Fund for Population Activities (UNFPA), which is considered one of the most important supporters of statistical work.

CSO takes this opportunity to give thanks and gratitude to UNFPA as well as to everyone who contributed and participated in preparing this report.

Finally, CSO hopes that this report will provide the desired benefit to the government, decision makers, and various development policy makers to help taking the necessary measures to achieve the desired progress in the areas of sustainable development.

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