

Annex to chapter 1

1. Data for SDG 1

SDG 1 comprises 7 targets and a total of 14 indicators (6 of which contain multiple subindicators). Of these indicators, 3 are tier I, 7 are tier II, and 4 are tier III for which data is not available, as the indicators are still in the process of methodological definition.

The United Nations Statistics Division provides the data sets for a total of eight indicators: 1.1.1 - Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural); 1.2.1 - Proportion of population living below the national poverty line, by sex and age; 1.3.1 - 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; 1.5.1 - Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population; 1.5.2 - Direct economic loss attributed to disasters in relation to global gross domestic product (GDP); 1.5.3 - Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030; 1.5.4 - Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies; 1.a.2 - Proportion of total government spending on essential services (education, health and social protection). Of the indicators or subindicators that we can use, none has sex-disaggregated data.

Data used in SDG 1 analysis was downloaded on 30 July 2018. After a country level data check following a major global SDG update from the United Nations Statistics Division of 8 July 2019, three series of 1.5.1 (Number of people affected by disaster (number); Number of deaths due to disaster (number); Number of missing persons due to disaster (number)) and one series of 1.5.2 (Direct economic loss attributed to disasters (millions of current United States dollars)) are replaced with amended data.

We examine data availability in the Arab region and implement data substitution, when needed, based on the criterion of having to cover half or more of the total Arab region's population and at least the third of the Arab countries for an indicator/subindicator to be kept in the analysis. This leads us to omit one of the two series of 1.1.1, and 13 of the 15 series of 1.3.1.

Indicator 1.5.1 is the exact repetition of 11.5.1 and 13.1.1 (Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population); 1.5.2 (Direct economic loss attributed to disasters in relation to global GDP) is almost identical to 11.5.2 (Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters); 1.5.3 is the exact repetition of 11.b.1 and 13.1.2 (Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030); and 1.5.4 is the exact repetition of 11.b.2 and 13.1.3 (Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies). We evaluate them in all chapters.

Indicator 1.5.1 has 15 subindicators, some of which mean the same but are expressed differently, include other subindicators thematically or join two subindicators in one. Some of these subindicators address material losses due to disasters, namely damaged or destroyed dwellings, without referring to the affected people. Moreover, three of these subindicators include disaggregation by "hazard type" with an extensive number of categories (59; making 189 total series under 1.5.1), yet they are incomplete when looking consistently across countries/territories. We present a summary of the series of 1.5.1 and how they relate to each other in table 1.

Table 1.1 Summary of the series provided by the United Nations Statistics Division for indicator 1.5.1 (also for indicator 13.1.1)

Series 1	Number of people affected by disaster	
Series 2	Number of injured or ill people attributed to disasters	
Series 3	Number of people whose livelihoods were disrupted or destroyed, attributed to disasters	Included in the first series
Series 4	Number of people whose damaged dwellings were attributed to disasters	
Series 5	Number of people whose destroyed dwellings were attributed to disasters	
Series 6	Number of directly affected persons attributed to disasters per 100,000 population	Expressed differently
Series 7	Number of missing persons due to disaster	
Series 8	Number of deaths due to disaster	
Series 9	Number of deaths and missing persons attributed to disasters, by hazard type	Joins the two series and with disaggregation by hazard type
Series 10	Number of deaths and missing persons attributed to disasters	Joins the two series
Series 11	Number of deaths and missing persons attributed to disasters per 100,000 population	Joins the two series and expressed differently
Series 12	Number of damaged dwellings attributed to disasters	
Series 13	Number of damaged dwellings attributed to disasters, by hazard type	With disaggregation by hazard type
Series 14	Number of destroyed dwellings attributed to disasters	
Series 15	Number of destroyed dwellings attributed to disasters, by hazard type	With disaggregation by hazard type

We observe that series 2, 3, 4 and 5 are included in series 1; series 6 is just a different way to express series 1; each of series 9, 10 and 11 join series 7 and 8 whereby series 9 also comes with disaggregation by hazard type and series 11 is also a different way to express series 10; and that series 13 and 15 are nothing but the respective hazard type disaggregated versions of series 12 and 14. When there are many subindicators that mean the same but are expressed differently, we choose the one among these subindicators that is more representative, is easier to interpret, and has more data availability. Furthermore, when a series thematically covers the other, we only keep the series which has the broader measure. In light of all this, we only preserve and evaluate the following five subindicators from 1.5.1: Number of people affected by disaster; Number of missing persons due to disaster; Number of deaths due to disaster; Number of damaged dwellings attributed to disasters; and Number of destroyed dwellings attributed to disasters.

The following indicators/subindicators are subject to our data substitution scheme for the year 2017, considering the data spanning 2009–2017. Table 1.2 shows the number of substituted data points for each year, including those from Arab countries.

Table 1.2 Data substitution scheme for selected indicators and subindicators

Indicator or subindicator	Number of substituted data points (Arab)	Year
	26 (0)	2016
	39 (1)	2015
	23 (2)	2014
	11 (2)	2013
1.1.1 (Proportion of population below international poverty line of US\$1.90)	13 (1)	2012
	10 (3)	2011
	10 (2)	2010
	11 (1)	2009
	22 (0)	2016
	23 (2)	2015
	19 (3)	2014
	12 (1)	2013
1.2.1 (Proportion of population living below the national poverty line)	15 (2)	2012
	10 (2)	2011
	10 (1)	2010
	10 (1)	2009

	2 (0)	2016
	5 (0)	2015
	18 (1)	2014
	13 (0)	2013
1.3.1 (Proportion of population covered by social assistance programmes) and (Poorest quintile covered by social assistance programmes)	17 (2)	2012
	10 (0)	2011
	12 (2)	2010
	12 (3)	2009
	5 (1)	2008*
	13 (0)	2016
	6 (0)	2015
	13 (1)	2014
	7 (1)	2013
1.5.1 (Number of people affected by disaster (number))	5 (1)	2012
	3 (1)	2011
	5 (1)	2010
	2 (1)	2009
	15 (1)	2016
	9 (0)	2015
	11 (1)	2014
	7 (1)	2013
1.5.1 (Number of deaths due to disaster (number))	3 (1)	2012
	6 (1)	2011
	5 (1)	2010
	1 (1)	2009

	9 (0)	2016
	7 (0)	2015
	5 (0)	2014
	4 (0)	2013
1.5.1 (Number of missing persons due to disaster (number))	5 (0)	2012
	3 (2)	2011
	7 (2)	2010
	4 (2)	2009
	6 (0)	2016
	14 (0)	2015
	24 (3)	2014
	10 (2)	2013
1.5.1 (Number damaged dwellings attributed to disasters (number)) and (Number destroyed dwellings attributed to disasters (number))	4 (1)	2012
	4 (0)	2011
	4 (1)	2010
	3 (1)	2009
	9 (0)	2016
	8 (0)	2015
	14 (1)	2014
	7 (2)	2013
1.5.2 (Direct economic loss attributed to disasters (millions of current United States dollars))	3 (0)	2012
	6 (2)	2011
	3 (1)	2010
	2 (1)	2009

	39 (4)	2016
	34 (2)	2015
	48 (1)	2014
	18 (1)	2013
1.a.2 (Proportion of total government spending on essential services, education)	5 (0)	2012
	7 (0)	2011
	6 (1)	2010
	7 (3)	2009
	6 (4)	2008*

* Exceptionally, to meet the criteria of having half of the Arab population covered, data substitution includes data from 2008.

This leaves us with 11 integral indicators/subindicators with which we can assess the position of the region on the 2030 Agenda, as noted in box 1.1.

Box 1.1	Summary list of preserved and examined indicators/subindicators
	<ul style="list-style-type: none"> Indicator 1.1.1 – 1 series out of 2 – Proportion of population below the international poverty line of US\$1.90 Indicator 1.2.1 – Proportion of population living below the national poverty line Indicator 1.3.1 – 2 series out of 15 – Proportion of population covered by social assistance programmes (Total), and Poorest quintile covered by social assistance programmes Indicator 1.5.1 – 5 series out of 189 – Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population Indicator 1.5.2 – 1 series out of 132 – Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters Indicator 1.a.2 – Proportion of total government spending on essential services, education

However, we lose the ability to determine the region's position two targets, as noted in box 1.2, and their indicators and subindicators. Table 1.3 contains a summary of targets, indicators, tiers and data availability in Arab countries for SDG 1.

Annex 1.2 for a graph of country level data values for each of the series/indicator for the years whose data points were used for every included country.

Box 1.2	Summary list of omitted targets
	<ul style="list-style-type: none"> 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance 1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions

The two preserved series under 1.3.1 are the “Poorest quintile covered by social assistance programmes” and the “Proportion of population covered by social assistance programmes” which includes the former. Therefore, we express the former as a share of the total population (i.e. we multiply it by 0.2) and then we analyse and evaluate the two series in a stacked bar chart where the latter series includes the former, knowing that they are on the same scale, range and unit.

United Nations Statistics Division metadata on 1.5.1 recommends calculations of the indicator as a simple summation of related indicators (deaths, missing people and affected people) from national disaster loss databases divided by the global population data and expressed per 100,000 people, which would cause us to lose half of the available observations. Thus, we report on all three people-related series in 1.5.1 separately and express them per 100,000 of the national population, while for the two dwellings-related series, where the availability of data for all Arab countries is the same for both, we add them together and form a sum.

Indicator 1.5.2 is very similar to 11.5.2, as it measures the direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters. In fact, this indicator is composed of 16 different subindicators, two of which have disaggregation by an extensive number of “hazard type” categories (59 categories; making a total of 132 series under 1.5.2) but is yet incomplete when looking consistently across countries/territories. Therefore, we drop these two disaggregated subindicators, noting that this does not entail any loss of informational value since each one has a sister subindicator that measures exactly the same dimension but without being disaggregated. This leaves us with 14 subindicators with no disaggregation. According to the United Nations Statistics Division metadata and especially the computation method it presents, 12 of the 14 subindicators are included (thematically) in the remaining two subindicators, namely: “Direct economic loss attributed to disasters (millions of current United States dollars)” and “Direct economic loss attributed to disasters relative to GDP (percentage)”. As these two latter subindicators mean the same, are as inclusive and have the same data availability but are just expressed differently, whereby the second one is expressed relative to global GDP and not to domestic GDP (which does not make it more indicative). We only keep the first subindicator, “Direct economic loss attributed to disasters (millions of current United States dollars)”.

The global, regional, and subregional aggregates of two series of 1.5.1 and 1.5.2 are calculated using a total sum, whereas the aggregate of 1.a.2 is calculated using a simple arithmetic mean. Because national poverty lines in 1.2.1 are country-specific, there is no aggregation at the regional or global level (United Nations Statistics Division metadata). The aggregates of all the other series and indicators are calculated using a weighted average. The method of aggregation, in general, as well as the weighting variables to be used for the weighted averages and the properties of the weighting variables are all chosen based on what is advised by the corresponding United Nations Statistics Division metadata or by the original source of the corresponding data that is referred to by this metadata. If none of these two references advise on the aggregation methods or weights, the decisions are made based on the most common scientific logic fitting the case and its feasibility (e.g. the availability of the needed data for the weighting variables). The year of the weighting variable data is the most commonly used year for the data of the respective series/indicator or the latest available year. The following weight was used for the series/indicators whose global, regional and subregional aggregates are weighted averages: Total population in 2015 (from the World Population Prospects). The chapter includes more details about the weighting variables, including which weight was used for which series or indicator.

We calculate the world, regional and subregional averages under each target and include the target value – when available – to facilitate comparability. For 1.1.1, which aims to “eradicate extreme poverty for all people everywhere ... by 2030”, we consider the target value as zero proportion of population below the international poverty line of US\$1.90. For 1.3.1, which measures the coverage of the population by social assistance programmes and aims to “Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable”, the target value is set as 100 per cent (i.e. coverage for everyone). However, for 1.5.1, 1.5.2 and 1.a, it is not possible to infer the official desired target value and thus it is not shown.

**Table 1.3 Targets, indicators, tiers and data availability for Arab countries – SDG 1
(End poverty in all its forms everywhere)**

Target	Indicator	Number of subindicators	Tier	Data availability*
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	1 chosen out of 2	Tier I	12
1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2.1 Proportion of population living below the national poverty line, by sex and age	1 chosen out of 1	Tier I	12
	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	(No data)	Tier II	x
1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	1.3.1 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	2 chosen out of 15	Tier II	9
1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	1.4.1 Proportion of population living in households with access to basic services	(No data)	Tier III	x
	1.4.2 Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure	(No data)	Tier II	x

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	5 chosen out of 189**	Tier II	12, 11, 6, 12, 12
	1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)	1 chosen out of 132***	Tier II	12
	1.5.3 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	(Dropped) 2	Tier I	x
	1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	(Dropped) 3	Tier II	x
1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions	1.a.1 Proportion of domestically generated resources allocated by the government directly to poverty reduction programmes	(No data)	Tier III	x
	1.a.2 Proportion of total government spending on essential services (education, health and social protection)	1 chosen out of 1	Tier II	16
	1.a.3 Sum of total grants and non-debt-creating inflows directly allocated to poverty reduction programmes as a proportion of GDP	(No data)	Tier III	x
1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions	1.b.1 Proportion of government recurrent and capital spending to sectors that disproportionately benefit women, the poor and vulnerable groups	(No data)	Tier III	x

* Figures refer to the number of Arab countries with data for the indicator, while x means there are no data or the indicator was dropped.

** For indicator 1.5.1, there exist 15 main series, three of which have disaggregation by hazard type (consisting of 59 different categories). Therefore, the total number of series for this indicator is 189, out of which we choose to keep only five series.

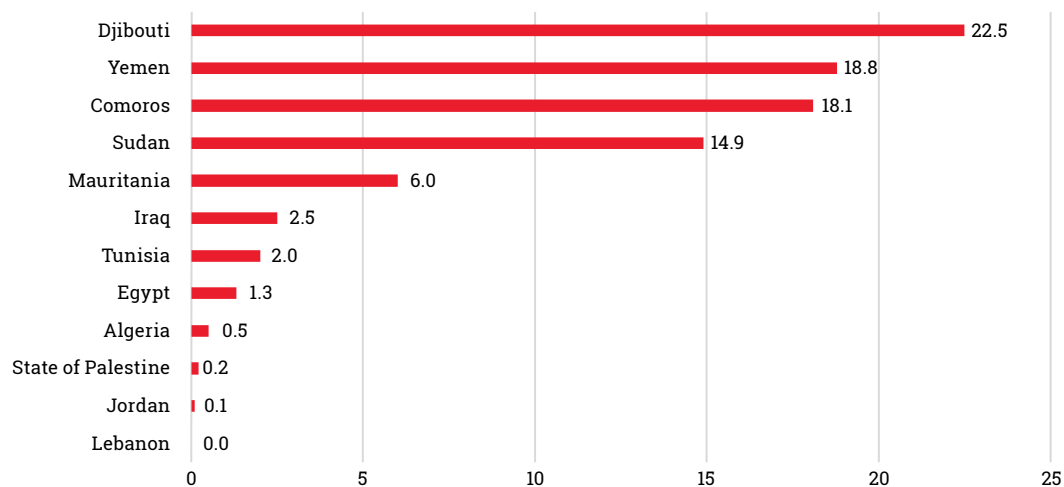
*** For indicator 1.5.2, there exist 16 main series, two of which have disaggregation by hazard type (consisting of 59 different categories). Therefore, the total number of series for this indicator is 132, out of which we choose to keep only one series.

Source: <https://unstats.un.org/sdgs/indicators/indicators-list/> and author's calculations.

2. Country graphs

Figure 1.1 Indicator 1.1.1 - Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

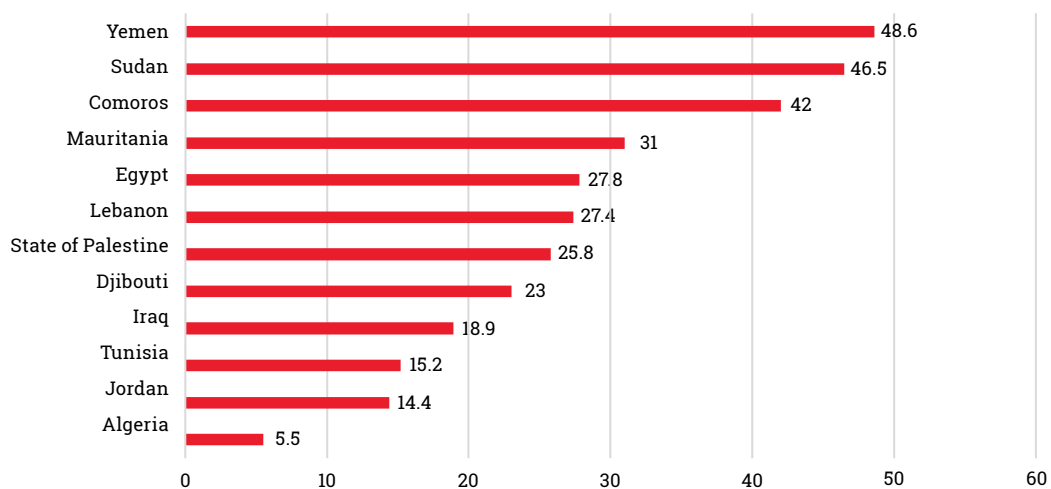
Proportion of population below international poverty line (percentage)



Note: Data are from various years as follows: Sudan (2009); Tunisia and Jordan (2010); Algeria, Lebanon and State of Palestine (2011); Iraq (2012); Comoros and Djibuti (2013); Mauritania and Yemen (2014); Egypt (2015).

Figure 1.2 Indicator 1.2.1 - Proportion of population living below the national poverty line, by sex and age

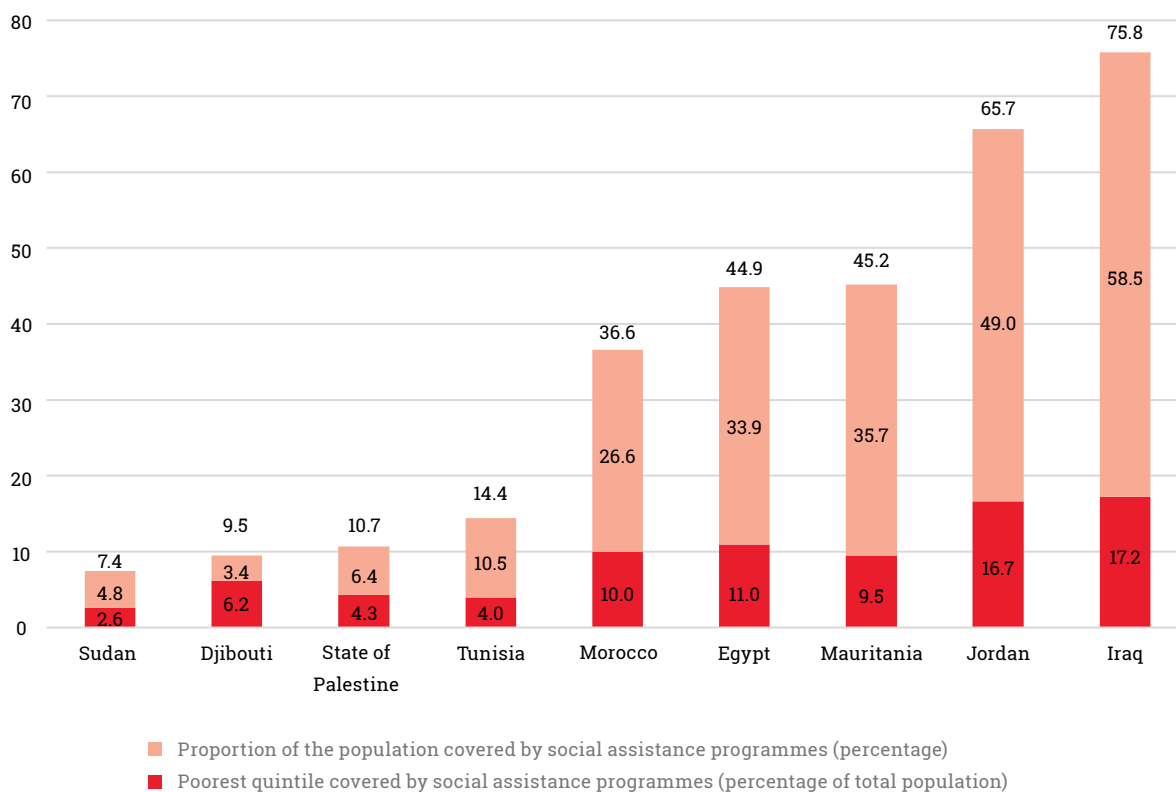
Proportion of population living below the national poverty line (percentage)



Note: Data are from various years as follows: Sudan (2009); Jordan (2010); Algeria and State of Palestine (2011); Iraq and Lebanon (2012); Djibuti (2013); Comoros, Mauritania and Yemen (2014); Egypt and Tunisia (2015).

Figure 1.3 Indicator 1.3.1 - 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

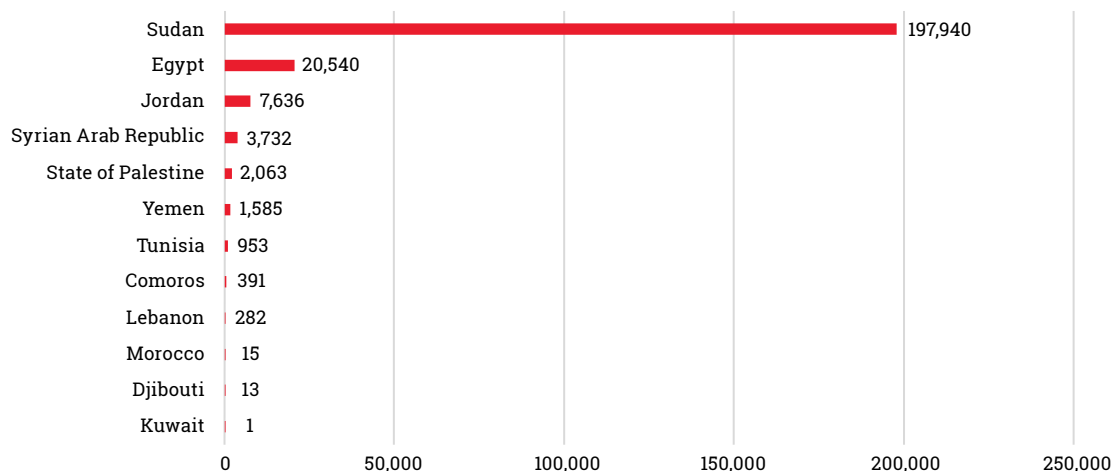
Proportion of population covered by social assistance programmes (percentage) and Poorest quintile covered by social assistance programmes (percentage of population)



Note: Data are from various years as follows: Egypt (2008); Morocco, State of Palestine and Sudan (2009); Jordan and Tunisia (2010); Djibouti and Iraq (2012); Mauritania (2014).

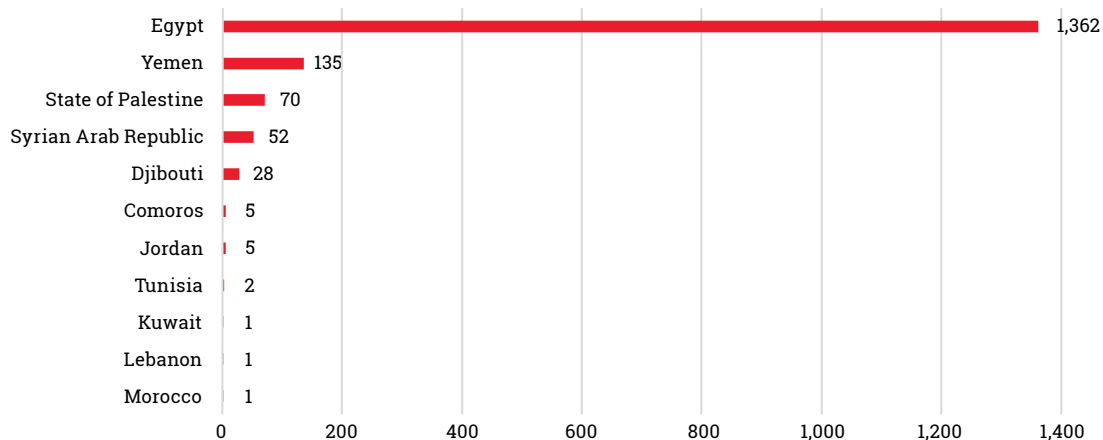
Figure 1.4 Five series of indicator 1.5.1 - Number of deaths, missing persons and persons affected by disaster per 100,000 population

Number of people affected by disaster (number)



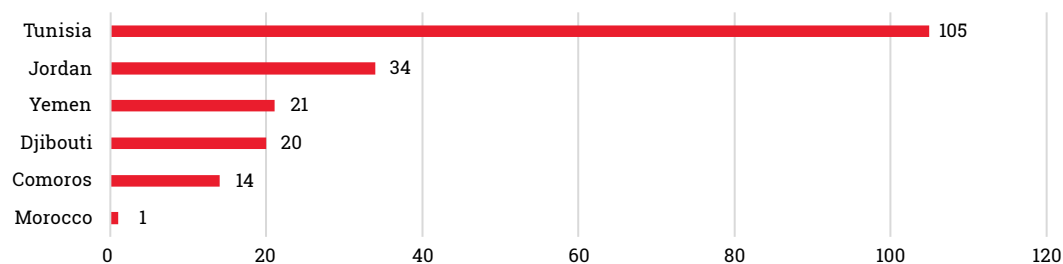
Note: Data are for 2017 apart from Syrian Arab Republic (2009), Yemen (2010), Kuwait (2011), Djibouti (2012), Tunisia (2013) and Morocco (2014).

Number of deaths due to disaster (number)



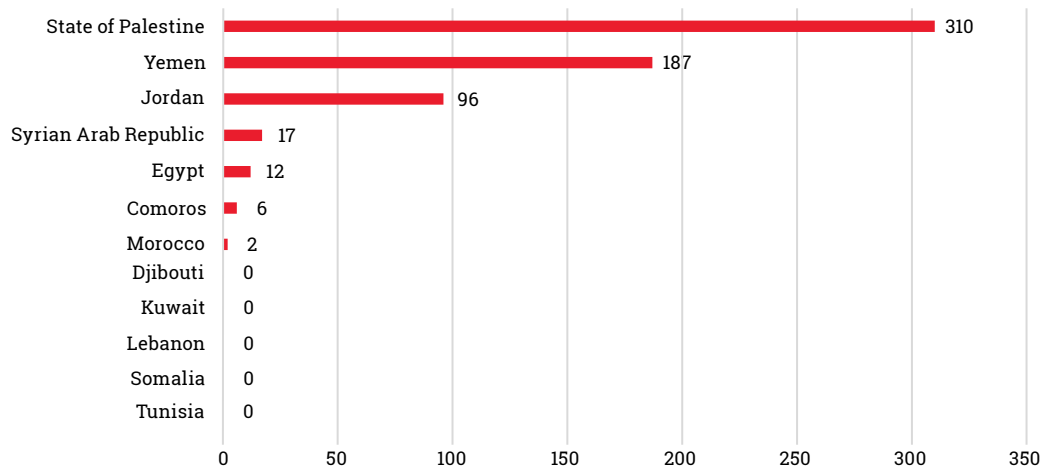
Note: Data are from 2017 apart from Syrian Arab Republic (2009), Yemen (2010), Kuwait (2011), Djibouti (2012), Tunisia (2013), Morocco (2014) and Lebanon (2016).

Number of missing persons due to disaster (number)



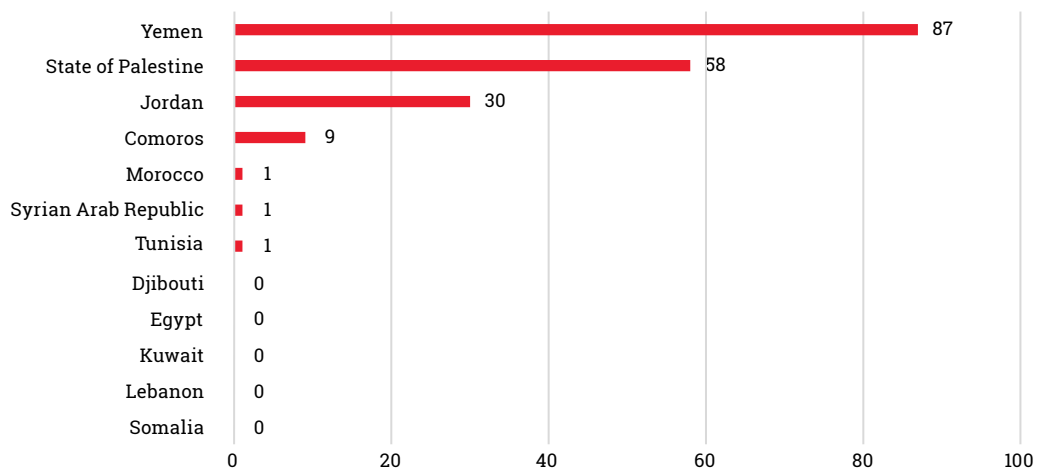
Note: Data are from various years as follows: Tunisia (2009); Jordan and Yemen (2010); Djibouti and Morocco (2011); Comoros (2017).

Number damaged dwellings attributed to disasters (number)



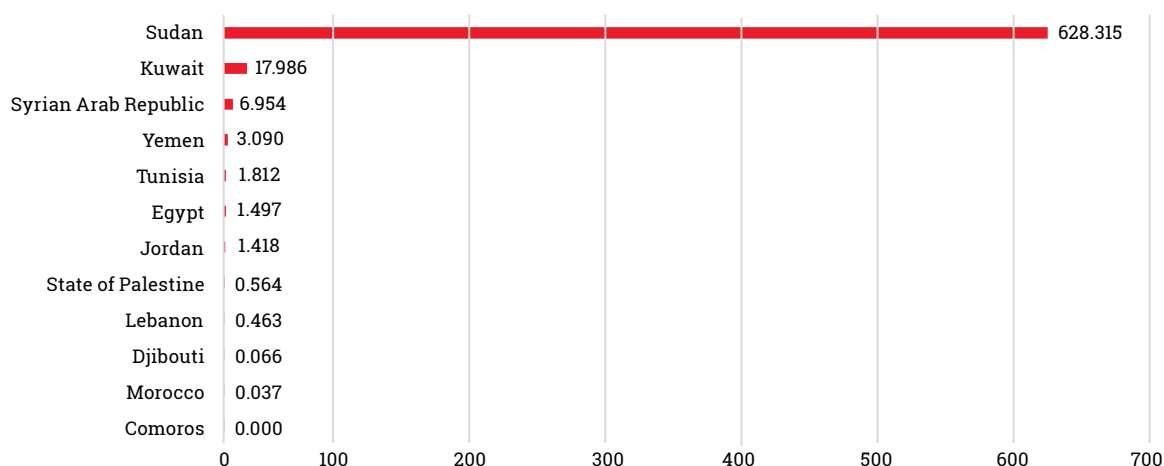
Note: Data are from 2017 apart from Syrian Arab Republic (2009), Yemen (2010), Djibouti (2012), State of Palestine and Tunisia (2013), Comoros, Lebanon and Morocco (2014).

Number destroyed dwellings attributed to disasters (number)



Note: Data are from 2017 apart from Syrian Arab Republic (2009), Yemen (2010), Djibouti (2012), State of Palestine and Tunisia (2013), Comoros, Lebanon and Morocco (2014).

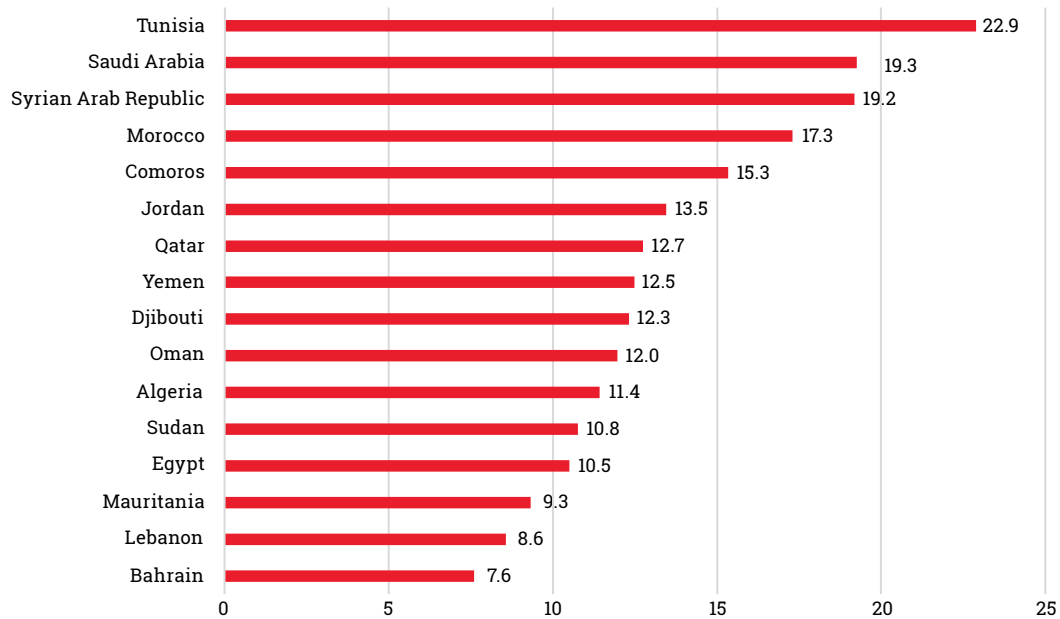
Figure 1.5 Indicator 1.5.2 - Direct disaster economic loss in relation to global gross domestic product (GDP)
Direct economic loss attributed to disasters (millions of current United States dollars)



Note: Data are from 2017 apart from Syrian Arab Republic (2009), Yemen (2010), Djibouti and Kuwait (2011), Comoros and Tunisia (2013), Morocco (2014).

Figure 1.6 Indicator 1.a.2 - Proportion of total government spending on essential services (education, health and social protection)

Proportion of total government spending on essential services, education (percentage)



Note: Data are from various years as follows: Algeria, Egypt, Saudi Arabia and Yemen (2008); Morocco, Sudan and Syrian Arab Republic (2009); Djibouti (2010); Lebanon (2013); Qatar (2014); Comoros and Tunisia (2015); Bahrain, Jordan, Mauritania and Oman (2016).