

# KEY FINDINGS OF THE SECOND REPORT (2016) OF THE MDG+ INITIATIVE: WATER SUPPLY

النتائج الرئيسية لتقرير مبادرة MDG+ الثاني (2016): إمدادات المياه

01/11/2016

Economic And Social Commission For Western Asia

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**Sustainable Development Policies Division**



UNITED NATIONS

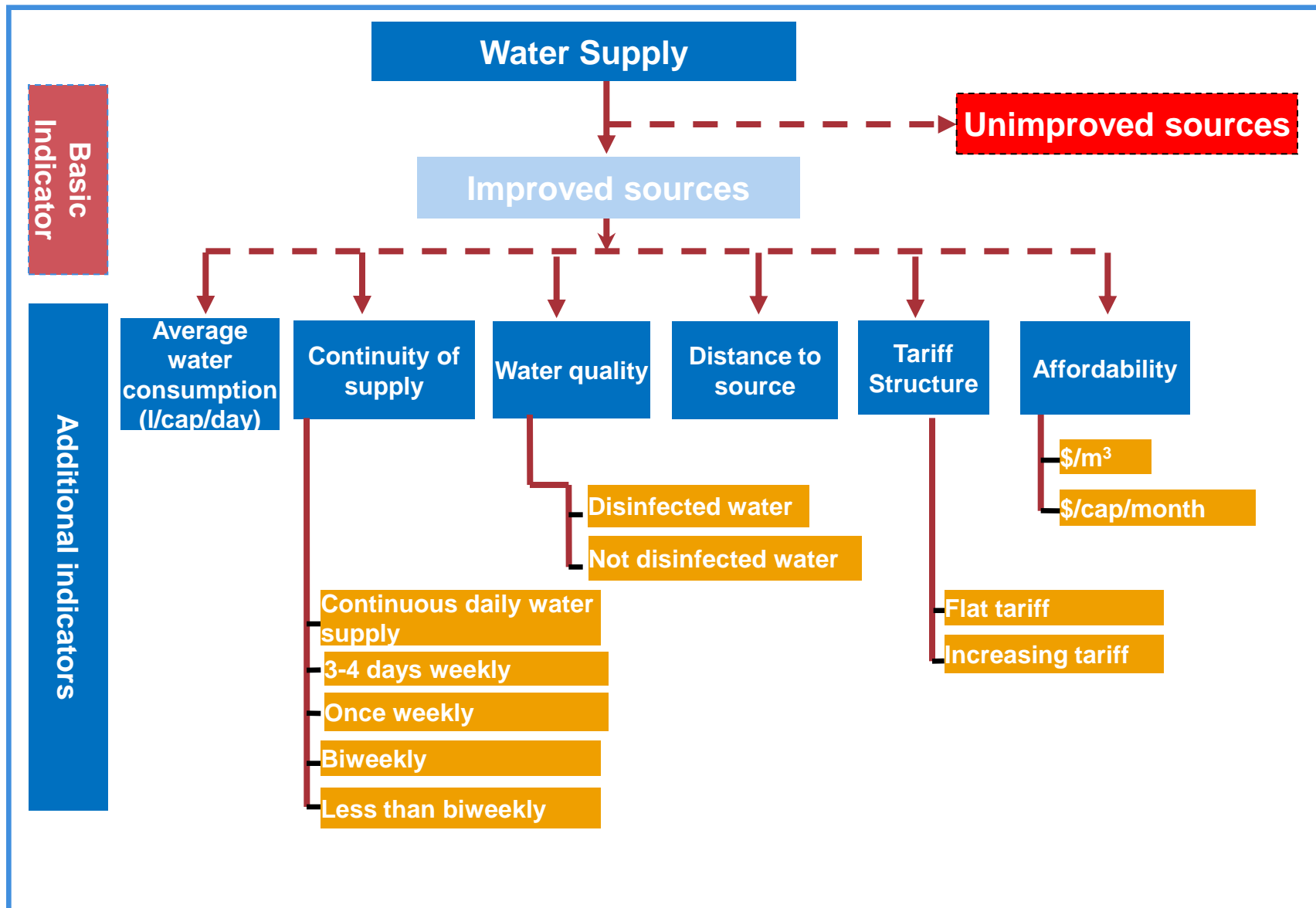
الاسكوا  
ESCWA

**1 Introduction**

**2 Concept and data**

**3 Key Findings**

# Introduction

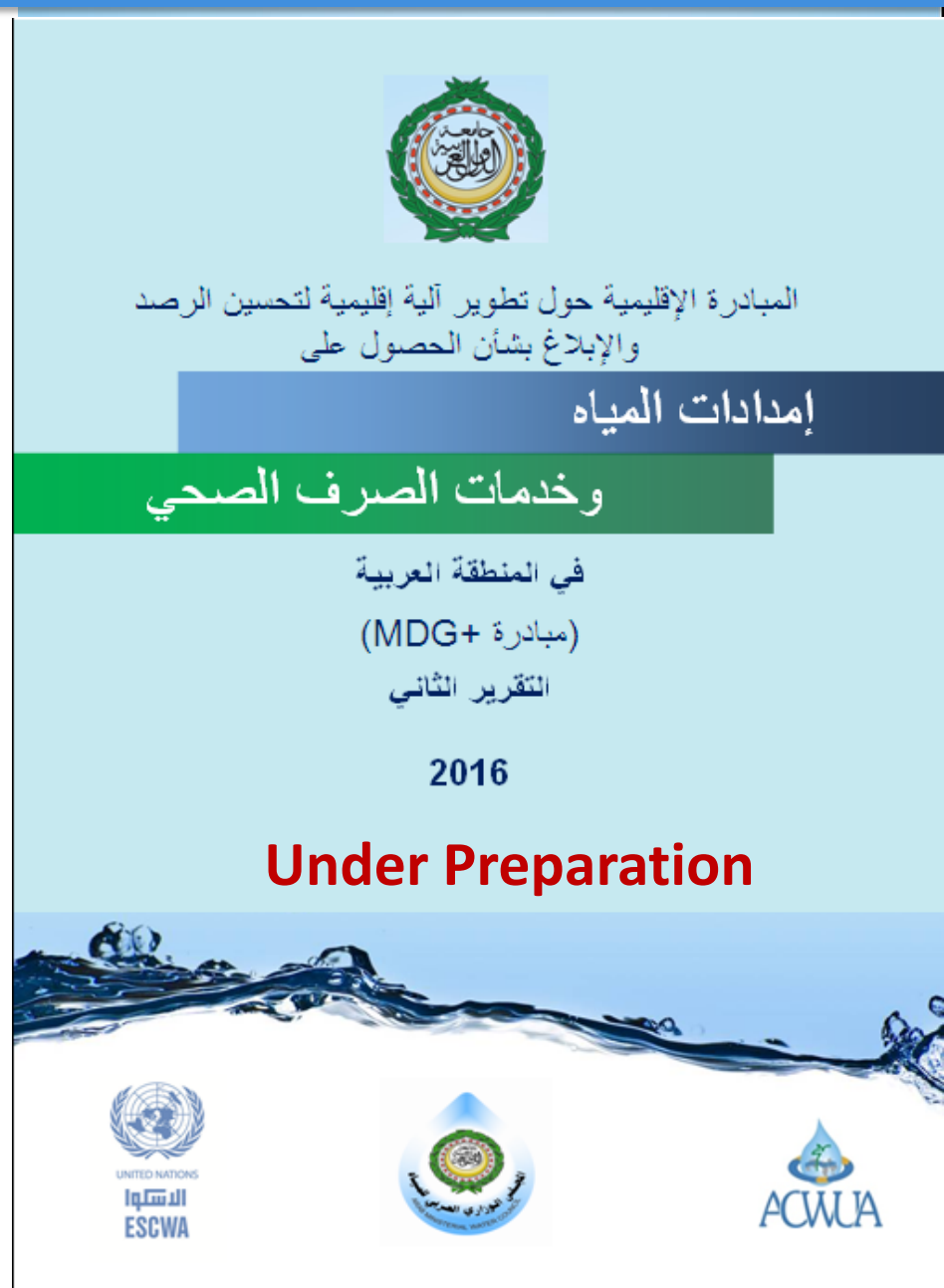


## Regional Reports

[http://www.acwua.org/sites/default/files/mdg\\_combined-email.pdf](http://www.acwua.org/sites/default/files/mdg_combined-email.pdf)

First report 2015

Second report 2016



**Under Preparation**

# Technical Guides

<http://www.escwa.un.org/arabic/information/pubdetails.asp?division=SDPD>

Guide to MDG+  
Indicators

اللجنة الاقتصادية والاجتماعية لغربي آسيا



$$QSP = \frac{TSP}{PSP \times 365} \times 10^3$$

$$PW_i = 1000 \times \frac{1}{365 \times 0.85} \times \frac{BD_i}{Q_i}$$

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مؤشرات إمدادات المياه  
والصرف الصحي

دليل تدريبي (مبادرة MDG+)



# Excel Tool & Training Manual

[http://www.escwa.un.org/arabic/information/pub\\_details.asp?division=SDPD](http://www.escwa.un.org/arabic/information/pub_details.asp?division=SDPD)

اللجنة الاقتصادية والاجتماعية لغربي آسيا



$$OSP = \frac{TSP}{PSP \times 365} \times 10^3$$

$$PVV_i = 1000 \times \frac{1}{365 \times 0.85} \times \frac{BD_i}{Q_i}$$

ملحق: أداة برنامج جداول البيانات أكسل

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مؤشرات إمدادات المياه  
والصرف الصحي

دليل تدريبي (مبادرة MDG+)



## Training workshops on evaluation of the indicators

More than 250 trainees  
from water and  
statistics sectors

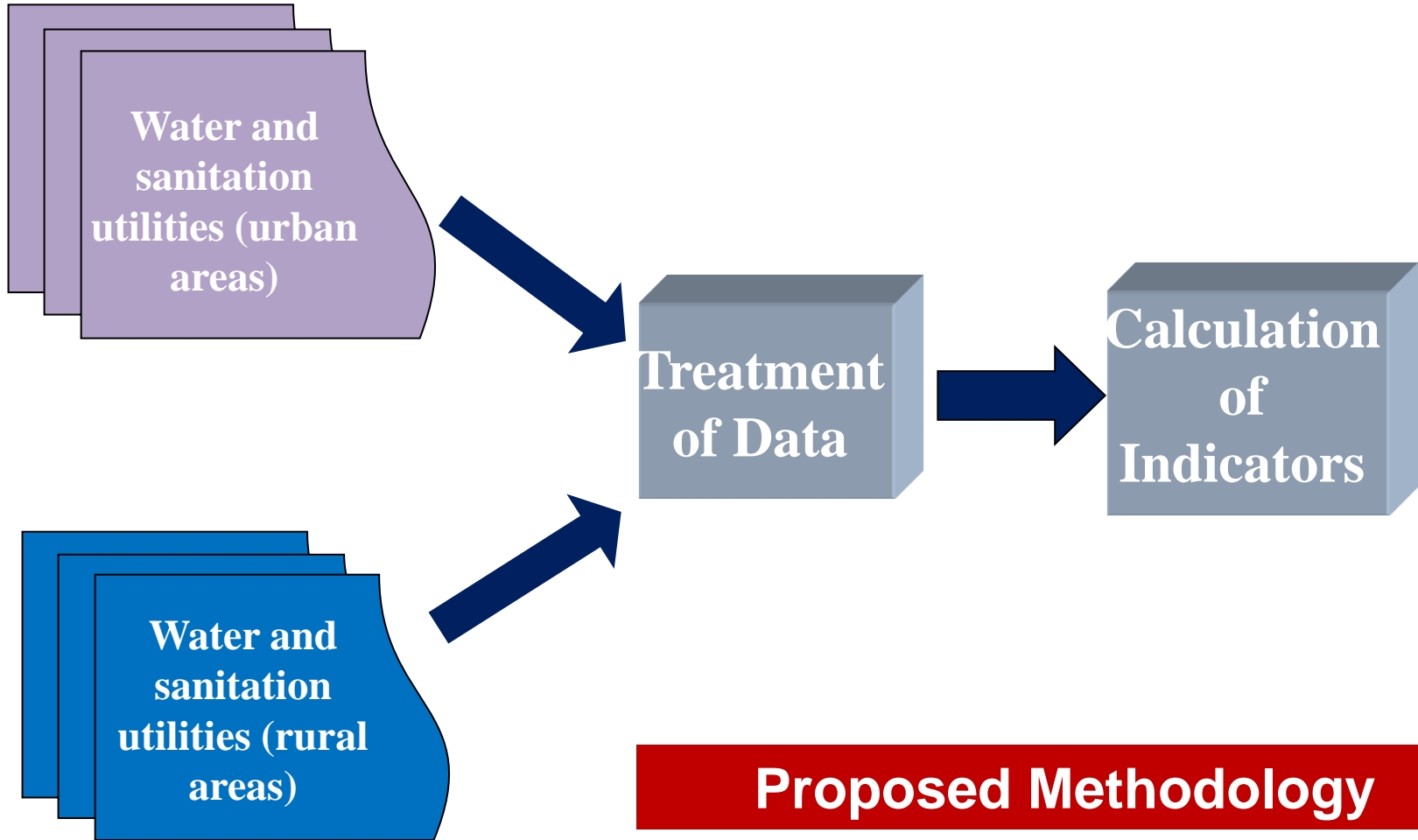
### 14 Arab countries

|                 |                    |
|-----------------|--------------------|
|                 | Lebanon (regional) |
| Algeria         |                    |
|                 | UAE                |
| Qatar           |                    |
|                 | Bahrain            |
| Lebanon (local) |                    |
|                 | Tunisia            |
| Oman            |                    |
|                 | Egypt              |
| Jordan          |                    |
|                 | Sudan              |
| Kuwait          |                    |
|                 | Saudi Arabia       |
| Mauritania      |                    |

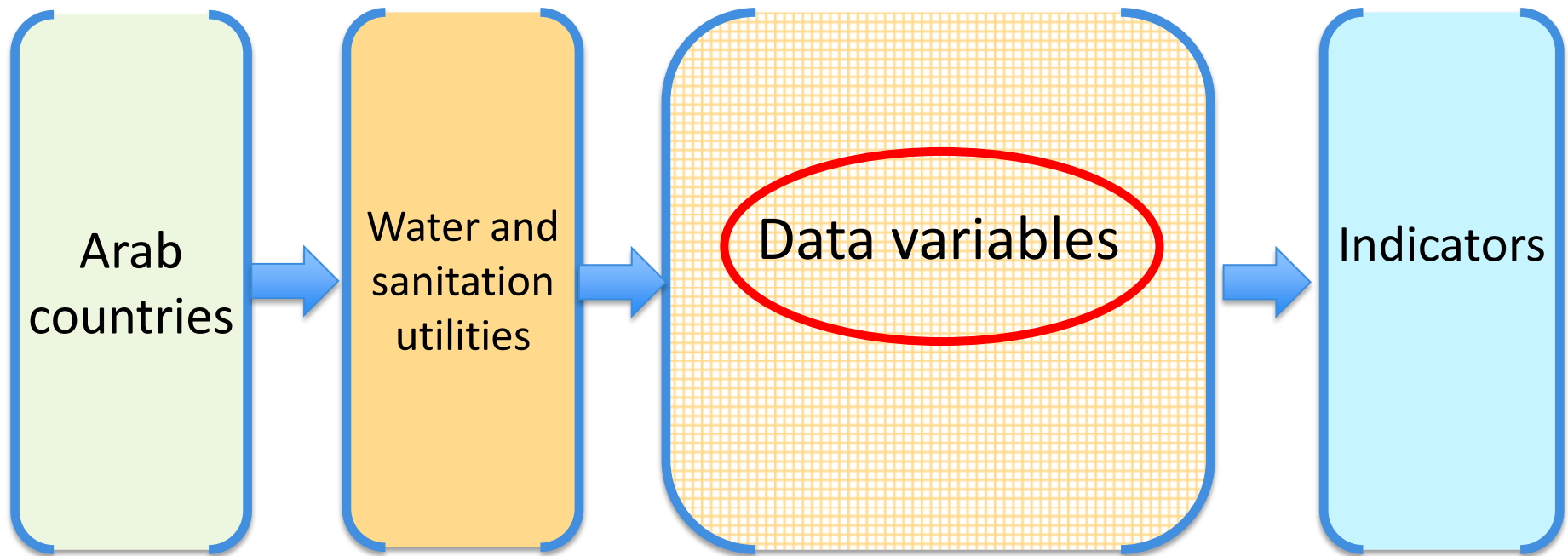


# Concept and data

## 2 Concept and data



## 2 Concept and data



# 2 Concept and data

## Second MDG+ report 2016

### MDG+ Initiative indicators calculated in No. of population

| General Data                    |              |       |       |  |              |       |       |
|---------------------------------|--------------|-------|-------|--|--------------|-------|-------|
| MCM per year                    | 2012 Data**  |       |       |  | 2013 Data    |       |       |
|                                 | Urban        | Rural | Total |  | Urban        | Rural | Total |
|                                 | 35884        | 45316 | 81200 |  | 37372        | 46095 | 83467 |
| Percentage (%)                  | 44           | 56    |       |  | 44           | 56    |       |
| Annual per capita income (USD)* | 2926 \$/year |       |       |  | 3100 \$/year |       |       |

| Water Supply                 |                |         |          |            |        |        |  |                |          |          |            |        |        |
|------------------------------|----------------|---------|----------|------------|--------|--------|--|----------------|----------|----------|------------|--------|--------|
| Population (x1000)           | 2012 data      |         |          |            |        |        |  | 2013 data      |          |          |            |        |        |
|                              | Supply network |         |          | Standpipes |        |        |  | Supply network |          |          | Standpipes |        |        |
|                              | Urban          | Rural   | Total    | Urban      | Rural  | Total  |  | Urban          | Rural    | Total    | Urban      | Rural  | Total  |
|                              |                |         |          |            |        |        |  |                |          |          |            |        |        |
| Connected to network         | 34584.78       | 43514.4 | 78099.19 | 240        | 825    | 1065   |  | 35728.0        | 45830.91 | 81558.91 | 240        | 825    | 1065   |
| Daily Per capita consumption |                |         |          |            |        |        |  |                |          |          |            |        |        |
| Liter/person/day             | 289            | 127     | 200      | 35         | 32     | 33     |  | 283.3          | 122.3    | 194.6    | 35         | 32     | 33     |
| Continuity of Supply         |                |         |          |            |        |        |  |                |          |          |            |        |        |
| Continuous                   | 34041.41       | 42929.8 | 76971.23 | 218.61     | 780.94 | 999.55 |  | 35115.28       | 45103.86 | 80219.14 | 218.61     | 780.94 | 999.55 |
| 3-4 days weekly              | 395.74         | 542.58  | 938.32   | 15.34      | 29.37  | 44.71  |  | 446.66         | 640.80   | 1087.46  | 15.34      | 29.37  | 44.71  |
| One day weekly               | 123.63         | 31.20   | 154.83   | 4.74       | 8.81   | 13.55  |  | 140.07         | 57.75    | 197.82   | 4.74       | 8.81   | 13.55  |
| One day biweekly             | 24.00          | 10.80   | 34.80    | 1.31       | 5.87   | 7.18   |  | 26.00          | 28.50    | 54.5     | 1.31       | 5.87   | 7.18   |
| Less than biweekly           | 0              | 0       |          | 0          | 0      | 0      |  | 0              | 0        | 0        | 0          | 0      | 0      |
| Water quality                |                |         |          |            |        |        |  |                |          |          |            |        |        |
| Treated water                | 34584.78       | 43514.4 | 78099.19 | 240        | 825    | 1065   |  | 35728.0        | 45830.91 | 81558.91 | 240        | 825    | 1065   |
| Untreated water              | -              | -       | -        | -          | -      | -      |  | -              | -        | -        | -          | -      | -      |
| Distance to sources          |                |         |          |            |        |        |  |                |          |          |            |        |        |
|                              |                |         |          |            |        |        |  |                |          |          |            |        |        |
| Tariff structure             |                |         |          |            |        |        |  |                |          |          |            |        |        |
| Monthly flat                 | -              | -       | -        |            |        |        |  | -              | 7979     | 11818    |            |        |        |
| Volumetric                   | 34584.78       | 43514.4 | 78099.19 |            |        |        |  | 35728.0        | 45830.91 | 81558.91 |            |        |        |
| Average Tariff (volumetric)  |                |         |          |            |        |        |  |                |          |          |            |        |        |
| (US \$/m3)                   | .102           | .08     | .09      | -          | -      | -      |  | .102           | .08      | .09      | -          | -      | -      |

# 2 Concept and data

## Second MDG+ report 2016

### MDG+ Indicators by Water Volume Annually

| Water-Supply                |                |         |          |           |        |        |  |                |         |         |           |        |        |
|-----------------------------|----------------|---------|----------|-----------|--------|--------|--|----------------|---------|---------|-----------|--------|--------|
| MCM/Annually                | 2012-Data*     |         |          |           |        |        |  | 2013-data      |         |         |           |        |        |
|                             | Supply-network |         |          | Standpipe |        |        |  | Supply-network |         |         | Standpipe |        |        |
|                             | Urban          | Rural   | Total    | Urban     | Rural  | Total  |  | Urban          | Rural   | Total   | Urban     | Rural  | Total  |
|                             |                |         |          |           |        |        |  |                |         |         |           |        |        |
| Produced-volume             | 5489.652       | 2892.02 | 8381.679 | 3.113     | 9.69   | 12.803 |  | 5644.60        | 2945.10 | 8589.69 | 3.113     | 9.69   | 12.803 |
|                             |                |         |          |           |        |        |  |                |         |         |           |        |        |
| Disributed-volume           | 3638.31        | 2025.89 | 5664.208 | 3.113     | 9.69   | 12.803 |  | 3694.46        | 2045.40 | 5739.86 | 3.113     | 9.69   | 12.803 |
| Continuity-of-Supply        |                |         |          |           |        |        |  |                |         |         |           |        |        |
| Continuous                  | 3589.233       | 1976.11 | 5565.345 | 2.8355    | 9.1725 | 12.008 |  | 3644.87        | 1994.52 | 5639.39 | 2.8355    | 9.1725 | 12.008 |
| 3-4-days-weekly             | 35.563         | 43.590  | 79.153   | 0.199     | 0.345  | 0.544  |  | 35.832         | 44.473  | 80.305  | 0.199     | 0.345  | 0.544  |
| One-day-weekly              | 11.048         | 3.962   | 15.010   | 0.0615    | 0.1035 | 0.165  |  | 11.128         | 4.088   | 15.216  | 0.0615    | 0.1035 | 0.165  |
| One-day-biweekly            | 2.465          | 2.237   | 4.702    | 0.017     | 0.069  | 0.086  |  | 2.631          | 2.321   | 4.953   | 0.017     | 0.069  | 0.086  |
| Less-than-biweekly          | 0              | 0       | 0        | 0         | 0      | -      |  | -              | 0       | -       | -         | -      | -      |
| Water-quality               |                |         |          |           |        |        |  |                |         |         |           |        |        |
| Treated-water               | 5489.65        | 2892.03 | 8381.68  | 3.113     | 9.69   | 12.803 |  | 5644.60        | 2945.10 | 8589.69 | 3.113     | 9.69   | 12.803 |
| Untreated-water             | -              | -       | -        | -         | -      | -      |  | -              | -       | -       | -         | -      | -      |
| Distance-to-sources         |                |         |          |           |        |        |  |                |         |         |           |        |        |
|                             |                |         |          |           |        |        |  |                |         |         |           |        |        |
| Tariff-structure            |                |         |          |           |        |        |  |                |         |         |           |        |        |
| Monthly-flat                | 0              | 0       | 0        |           |        |        |  | -              | -       | -       |           |        |        |
| Volumetric                  | 3638.31        | 2025.89 | 5664.208 |           |        |        |  | 3694.46        | 2045.40 | 5739.86 |           |        |        |
| Average-Tariff-(volumetric) |                |         |          |           |        |        |  |                |         |         |           |        |        |
| (US-\$/m3)                  | 0.102          | .08     | .09      | -         | -      | -      |  | .102           | .08     | .09     | -         | -      |        |

(-) Data-unavailable

# 2 Concept and data

## Second MDG+ report 2016

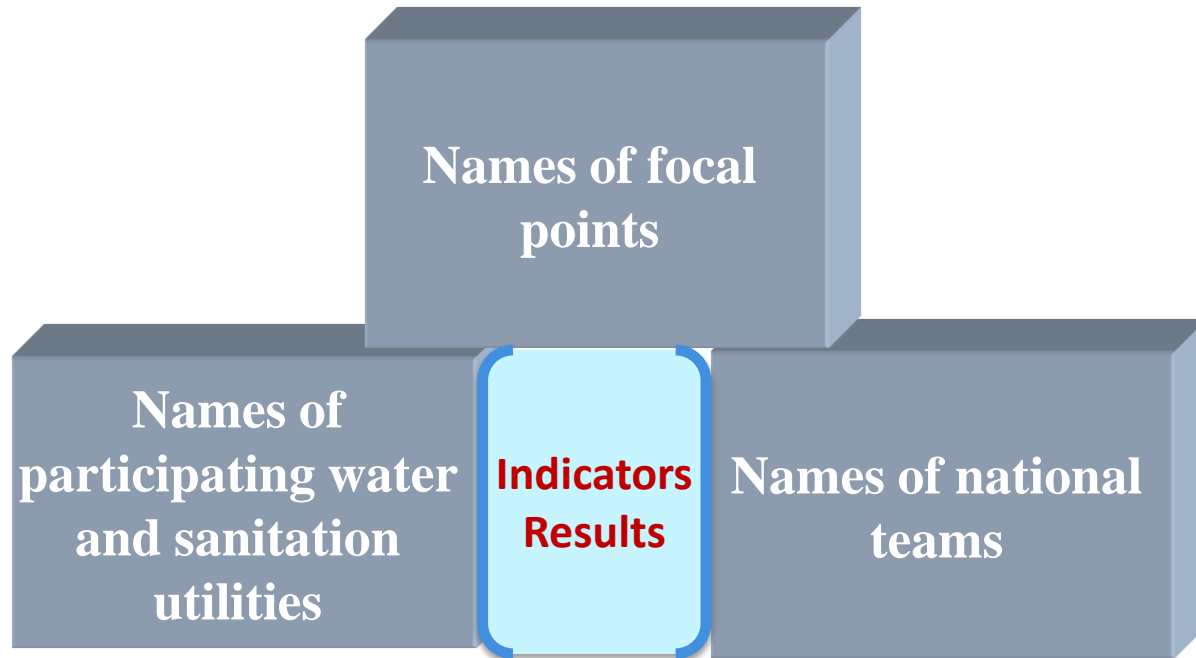
### MDG+ Initiative Indicators—Water Supply-Based on 2013 Data¶

#### People Served with House Connection—Urban Areas¶

| Country¶    | ¶    | No-of-people-served-(Million)¶ | Average-daily-per-capita-consumption¶ | people-served-by-house-connection-(Million)¶ | Continuity-of-Supply-(million-people)¶ |                    |              |           |                     | Water-Quality-(million-people)¶ |                | Tariff-Structure¶ (million-people)¶ |             | ¶ (US-\$/m³)¶ |
|-------------|------|--------------------------------|---------------------------------------|--|--|--------------------|--------------|-----------|---------------------|---------------------------------|----------------|-------------------------------------|-------------|---------------|
|             |      |                                |                                       |  | Continuous-supply¶                     | 3-4-days-per-week¶ | Once-weekly¶ | Biweekly¶ | Less-than-biweekly¶ | Treated-water¶                  | Treated-water¶ | Monthly-Flat¶                       | Volumetric¶ |               |
| Algeria¶    | No,¶ | 38.70¶                         | 125.80¶                               | 32.38¶                                       | 20.32¶                                 | 12.07¶             | 0.00¶        | 0.00¶     | 0.00¶               | 32.38¶                          | 0.00¶          | 0.00¶                               | 32.38¶      | 0.06¶         |
| Bahrain¶    | No,¶ | 1.25¶                          | 312.50¶                               | 1.25¶  | 1.25¶                                  | 0.00¶              | 0.00¶        | 0.00¶     | 0.00¶               | 1.25¶                           | 0.00¶          | 0.00¶                               | 1.25¶       | 0.07¶         |
| Egypt¶      | No,¶ | 37.37¶                         | 283.30¶                               | 35.73¶                                       | 35.12¶                                 | 0.45¶              | 0.14¶        | 0.03¶     | 0.00¶               | 35.73¶                          | 0.00¶          | 0.00¶                               | 35.73¶      | 0.10¶         |
| Iraq¶       | No,¶ | -¶                             | 377.00¶                               | 21.42¶                                       | 21.37¶                                 | 0.05¶              | 0.00¶        | 0.00¶     | 0.00¶               | 21.42¶                          | 0.00¶          | 2.36¶                               | 19.05¶      | 0.01¶         |
| Jordan¶     | No,¶ | 6.53¶                          | 87.73¶                                | 6.165¶                                       | 0.15¶                                  | 0.00¶              | 6.02¶        | 0.00¶     | 0.00¶               | 6.165¶                          | 0.00¶          | 0.00¶                               | 6.165¶      | 0.17¶         |
| Kuwait¶     | No,¶ | -¶                             | 391.20¶                               | 3.84¶  | 3.84¶                                  | 0.00¶              | 0.00¶        | 0.00¶     | 0.00¶               | 3.84¶                           | 0.00¶          | 0.00¶                               | 3.84¶       | 0.63¶         |
| Lebanon¶    | No,¶ | 4.82¶                          | 187.00¶                               | 3.70¶  | 1.24¶                                  | 2.35¶              | 0.11¶        | 0.00¶     | 0.00¶               | 3.36¶                           | 0.34¶          | 3.70¶                               | 0.00¶       | -¶            |
| Libya¶      | No,¶ | -¶                             | -¶                                    | -¶   | -¶                                     | -¶                 | -¶           | -¶        | -¶                  | -¶                              | -¶             | -¶                                  | -¶          | -¶            |
| Mauritania¶ | No,¶ | 1.71¶                          | 94.70¶                                | 0.69¶  | 0.69¶                                  | 0.00¶              | 0.00¶        | 0.00¶     | 0.00¶               | 0.69¶                           | 0.00¶          | 0.00¶                               | 0.69¶       | 0.30¶         |
| Morocco¶    | No,¶ | 19.51¶                         | 105.50¶                               | 20.66¶                                       | 20.66¶                                 | 0.00¶              | 0.00¶        | 0.00¶     | 0.00¶               | 20.66¶                          | 0.00¶          | 0.00¶                               | 20.66¶      | 0.77¶         |
| Oman¶       | No,¶ | 3.87¶                          | 152.00¶                               | 3.12¶  | 3.12¶                                  | 0.00¶              | 0.00¶        | 0.00¶     | 0.00¶               | 3.12¶                           | 0.00¶          | 0.00¶                               | 3.12¶       | 1.90¶         |
| Palestine¶  | No,¶ | 3.68¶                          | 48.20¶                                | 3.72¶  | 0.69¶                                  | 2.57¶              | 0.13¶        | 0.21¶     | 0.11¶               | 1.99¶                           | 1.73¶          | 1.58¶                               | 2.14¶       | 0.80¶         |
| Qatar¶      | No,¶ | 2.00¶                          | 461.70¶                               | 2.00¶  | 2.00¶                                  | 0.00¶              | 0.00¶        | 0.00¶     | 0.00¶               | 2.00¶                           | 0.00¶          | 0.00¶                               | 2.00¶       | 1.20¶         |
| KSA¶        | No,¶ | 30.14¶                         | 200.00¶                               | 30.14¶                                       | 30.14¶                                 | 0.00¶              | 0.00¶        | 0.00¶     | 0.00¶               | 30.14¶                          | 0.00¶          | 0.00¶                               | 30.14¶      | 0.03¶         |
| Sudan¶      | No,¶ | -¶                             | 173.60¶                               | 7.48¶  | 6.62¶                                  | 0.11¶              | 0.75¶        | 0.00¶     | 0.00¶               | 3.69¶                           | 3.80¶          | 7.39¶                               | 0.10¶       | -¶            |
| Tunisia¶    | No,¶ | 7.29¶                          | 128.00¶                               | 7.29¶  | 7.29¶                                  | 0.00¶              | 0.00¶        | 0.00¶     | 0.00¶               | 7.29¶                           | 0.00¶          | 0.00¶                               | 7.29¶       | 0.22¶         |
| UAE¶        | No,¶ | -¶                             | -¶                                    | -¶   | -¶                                     | -¶                 | -¶           | -¶        | -¶                  | -¶                              | -¶             | -¶                                  | -¶          | -¶            |
| Yemen¶      | No,¶ | 7.08¶                          | 59.00¶                                | 4.46¶  | 2.06¶                                  | 0.61¶              | 0.94¶        | 0.32¶     | 0.53¶               | 3.12¶                           | 1.34¶          | 0.00¶                               | 4.46¶       | 1.17¶         |

## 2 Concept and data

Second MDG+ report 2016

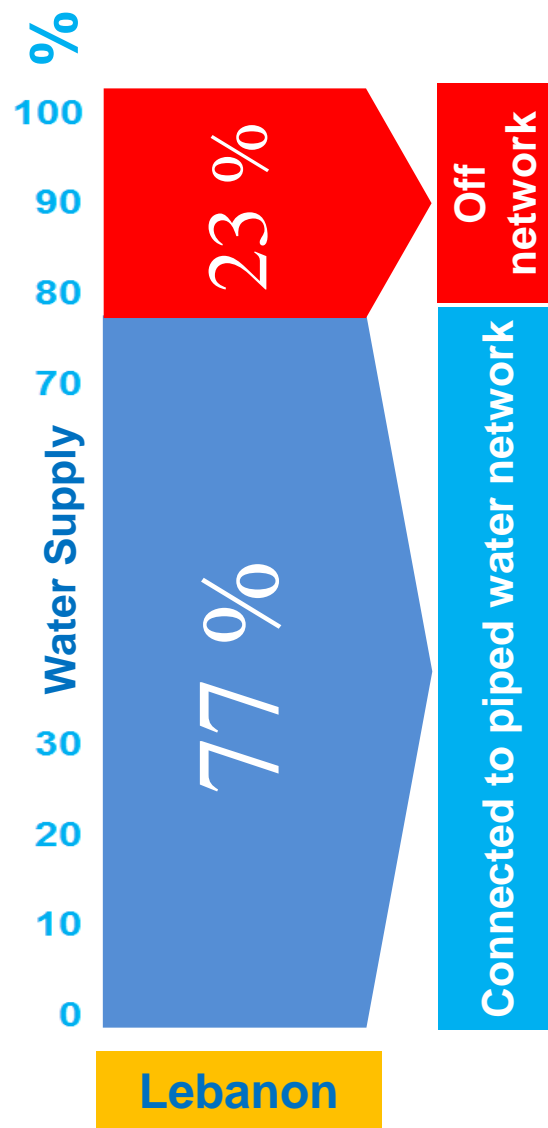


# Key Findings



3

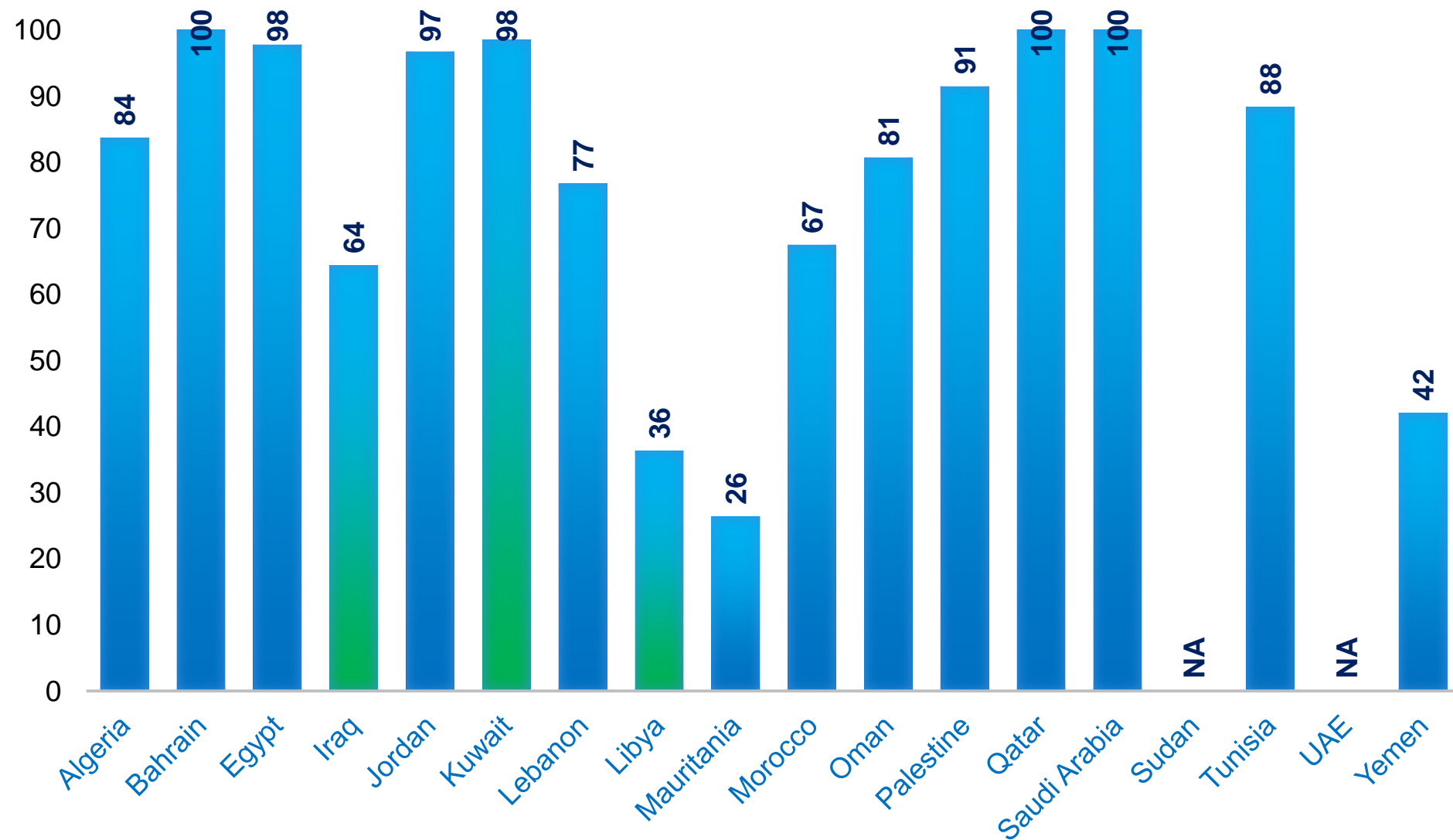
## % of population connected to piped water



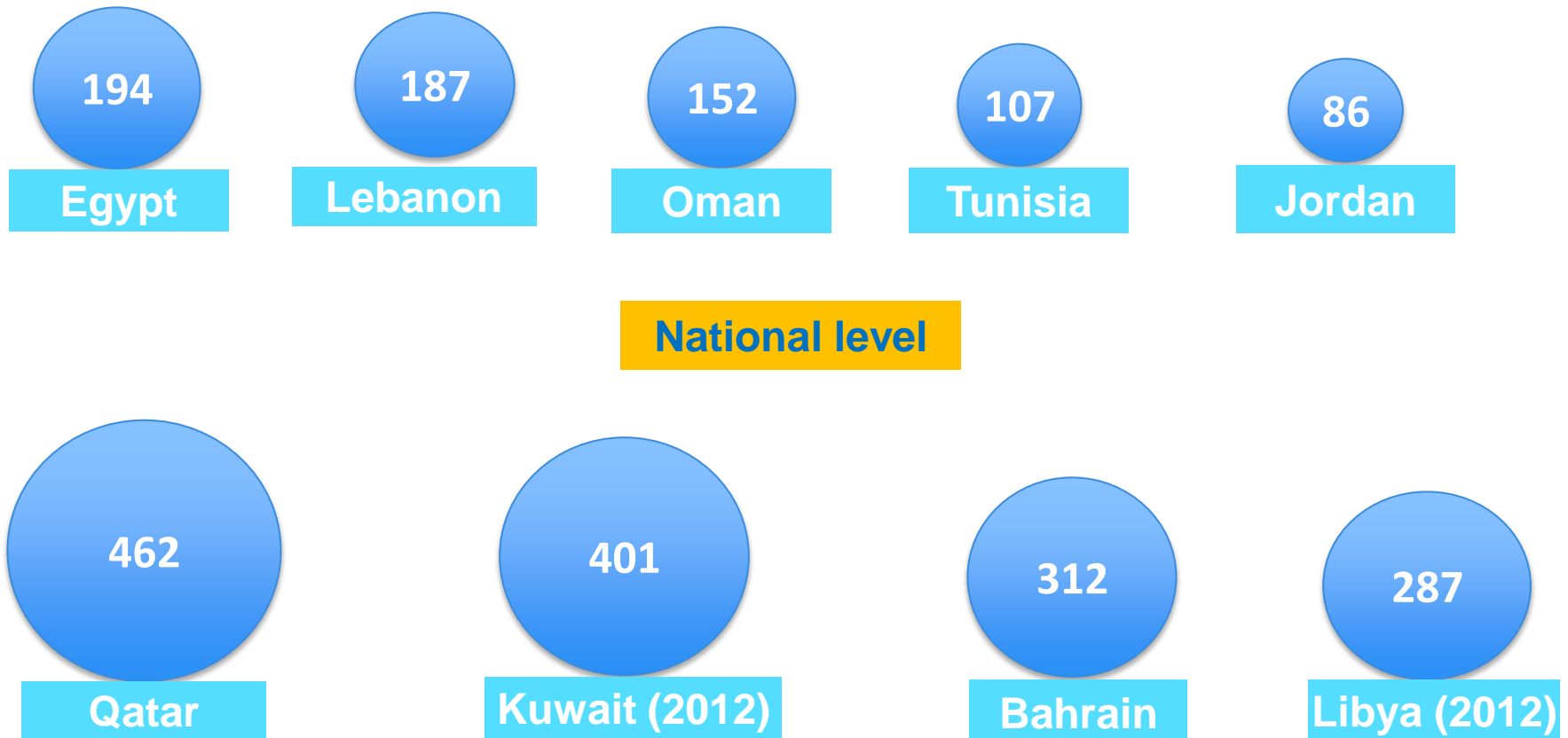
3

# % Population connected to piped water network

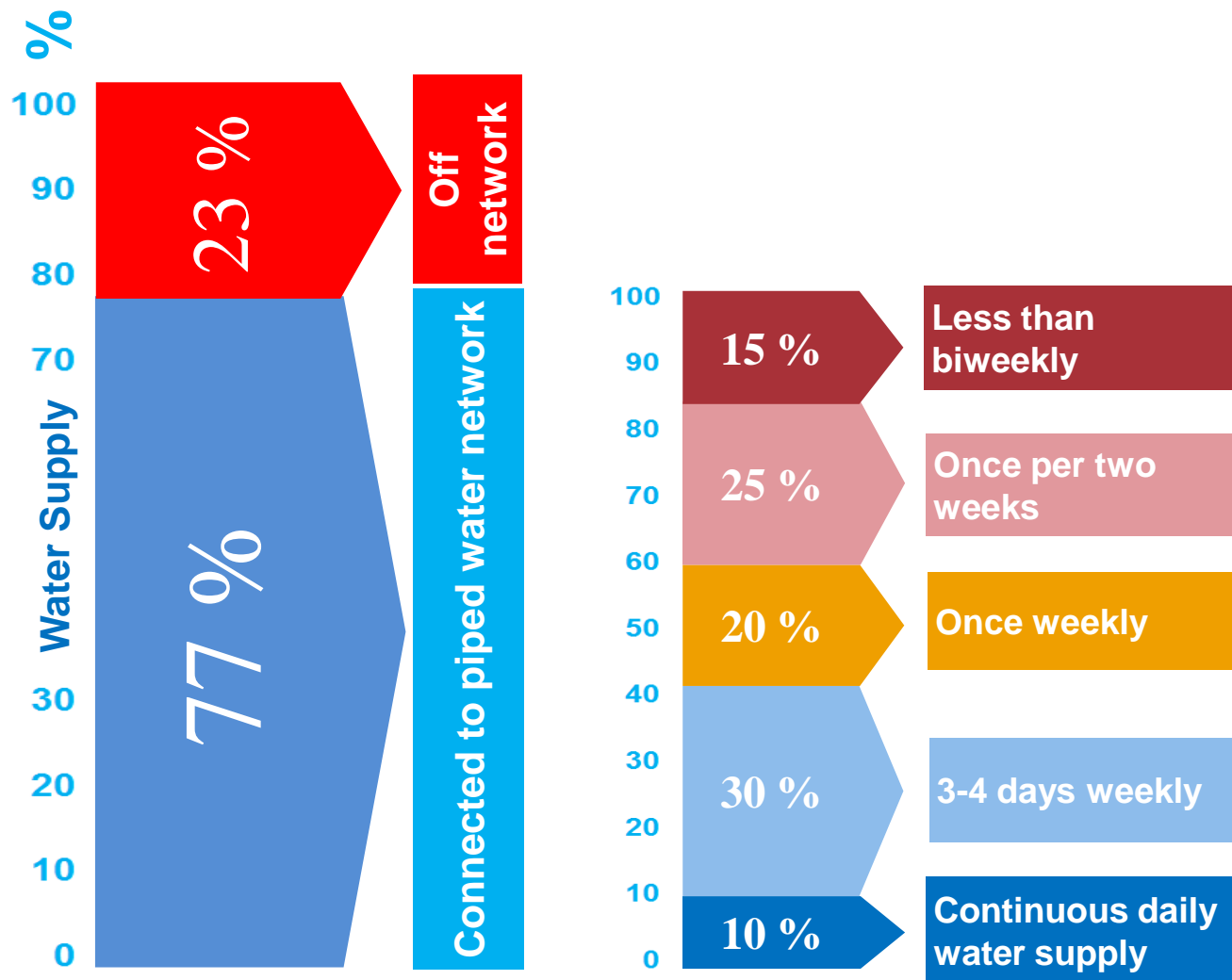
National level



## Average water consumption for population connected to piped network (l/cap/day)



### 3 Continuity of water supply



### 3 Continuity of water supply

Jordan  
(National)

%

100

90

80

70

Water Supply

30

20

10

0

Off network

97 %

Connected to piped water network

100

90

80

70

60

50

40

30

20

10

0

97 %

Once weekly

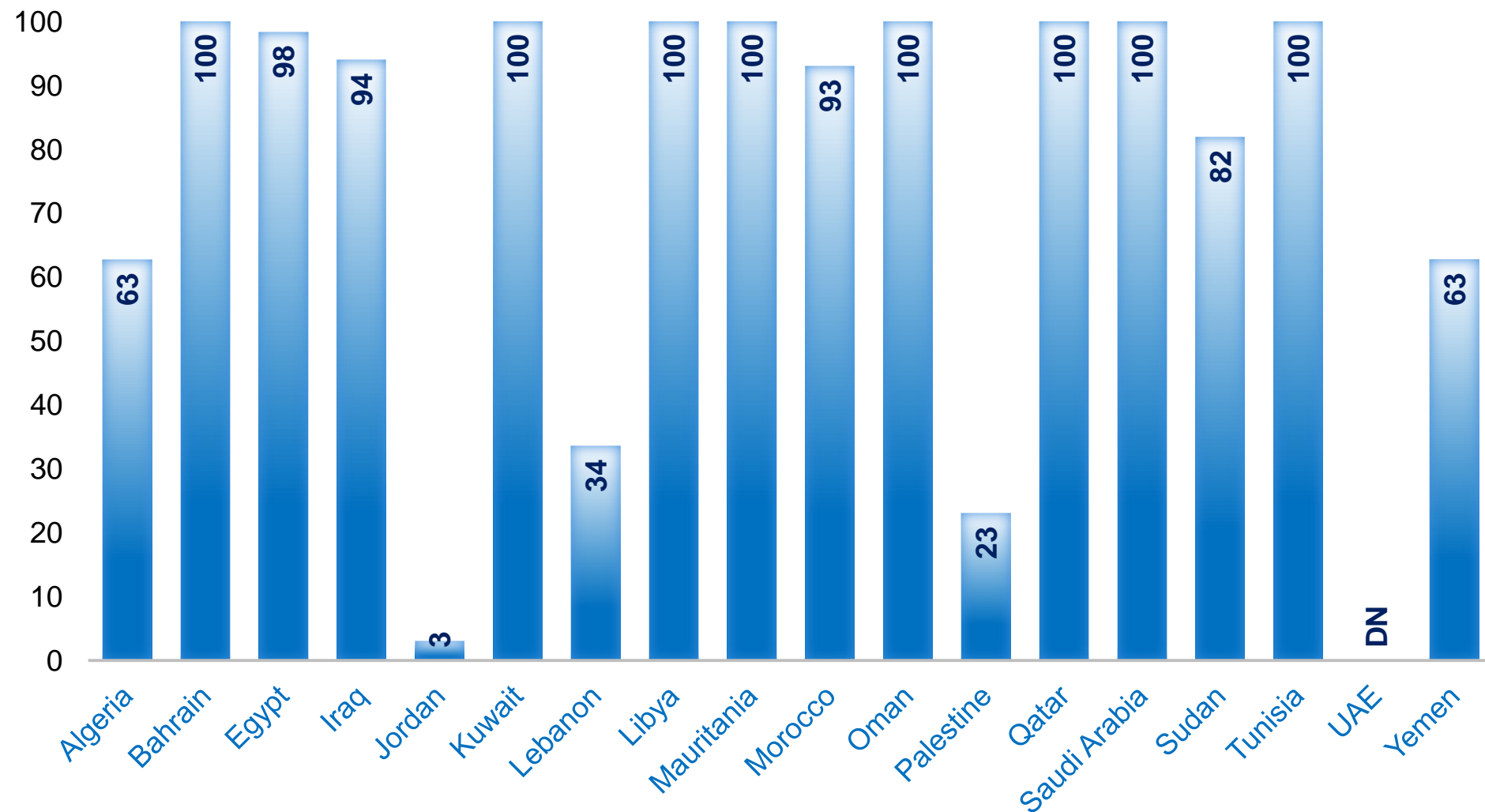
3 %

Continuous daily water supply

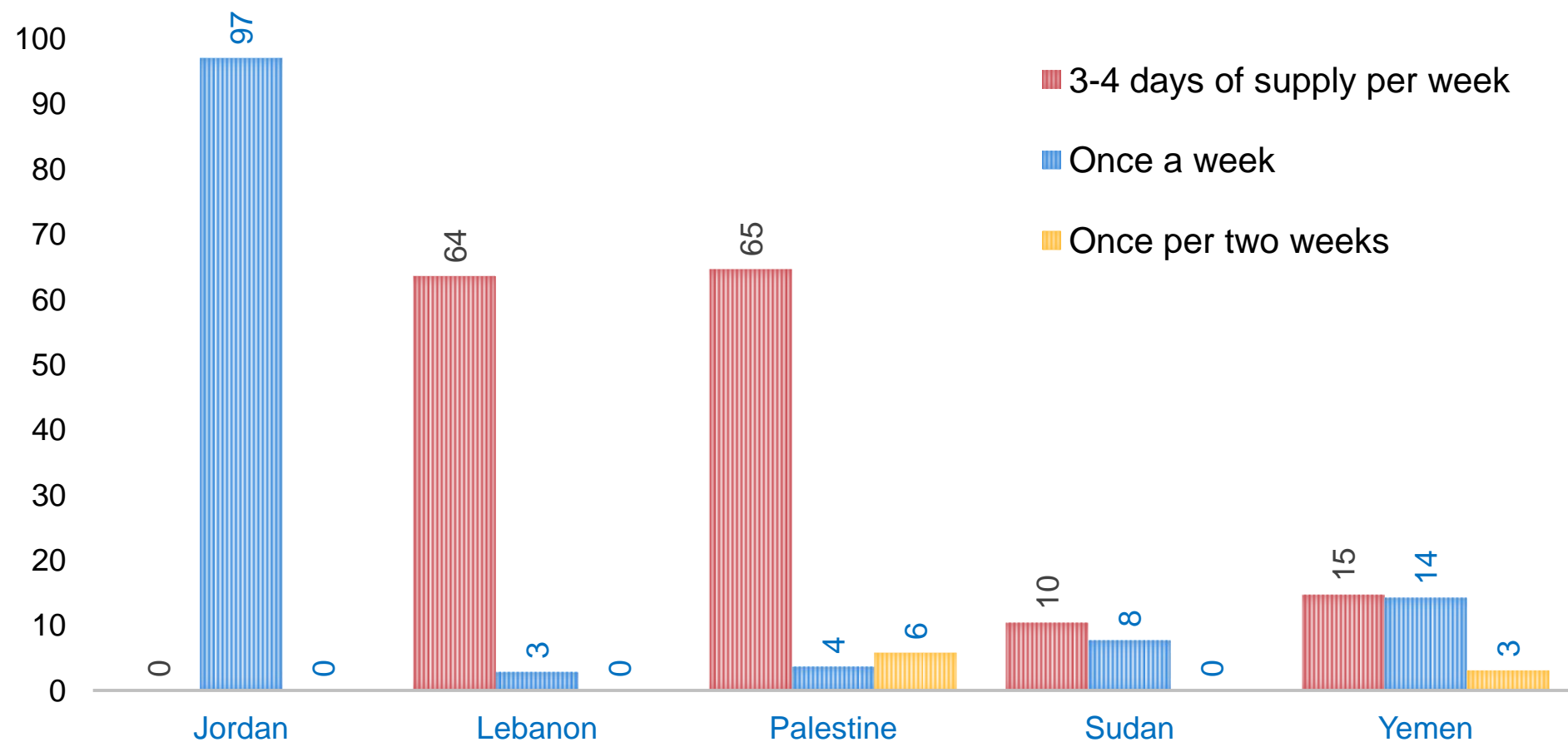
### 3 Continuity of water supply

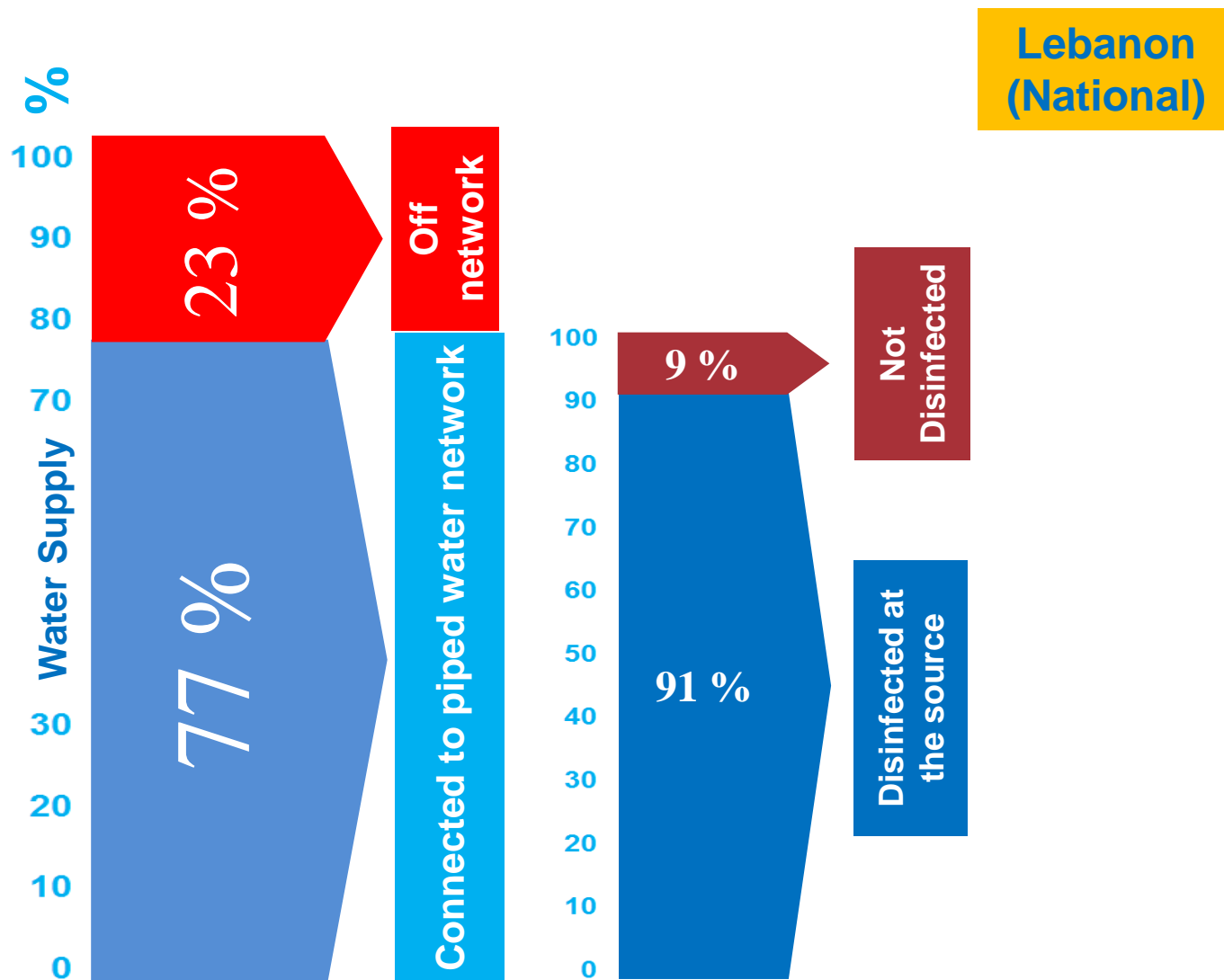
%

Proportion of population connected to piped water network receiving their water daily (%)



### 3 Continuity of water supply

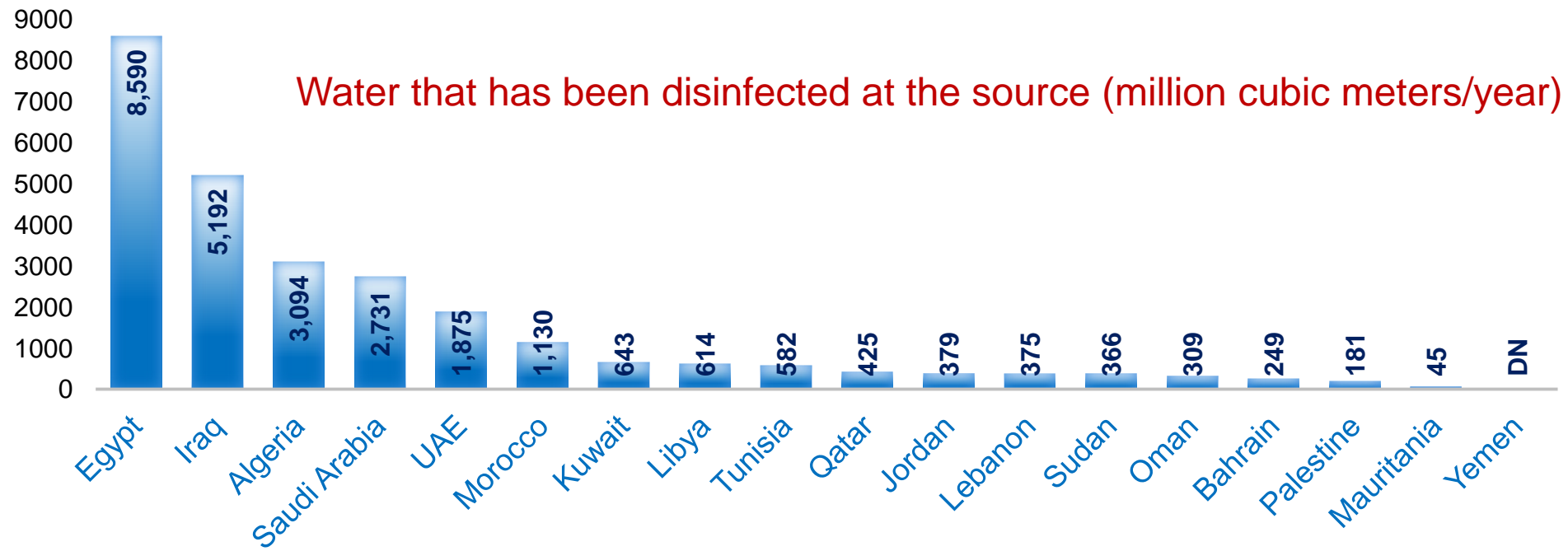
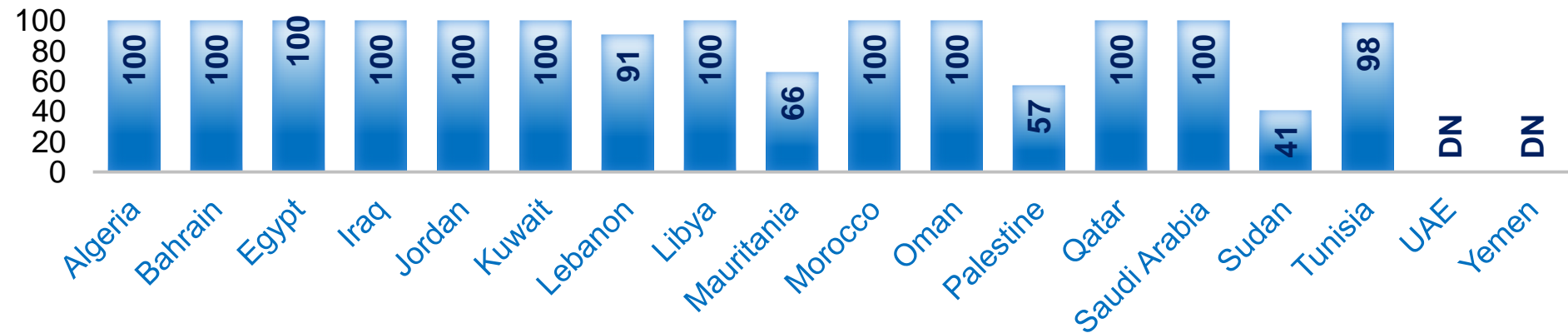


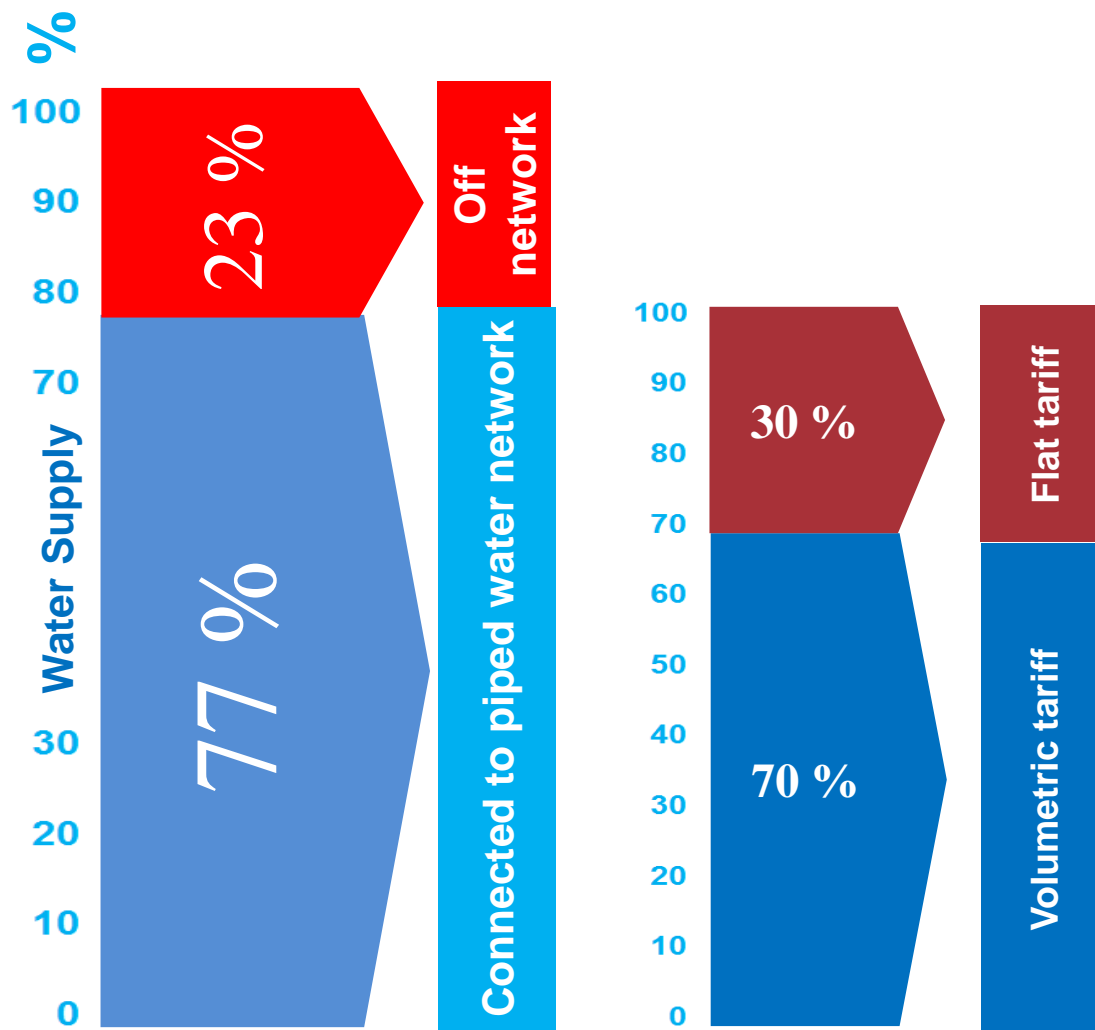




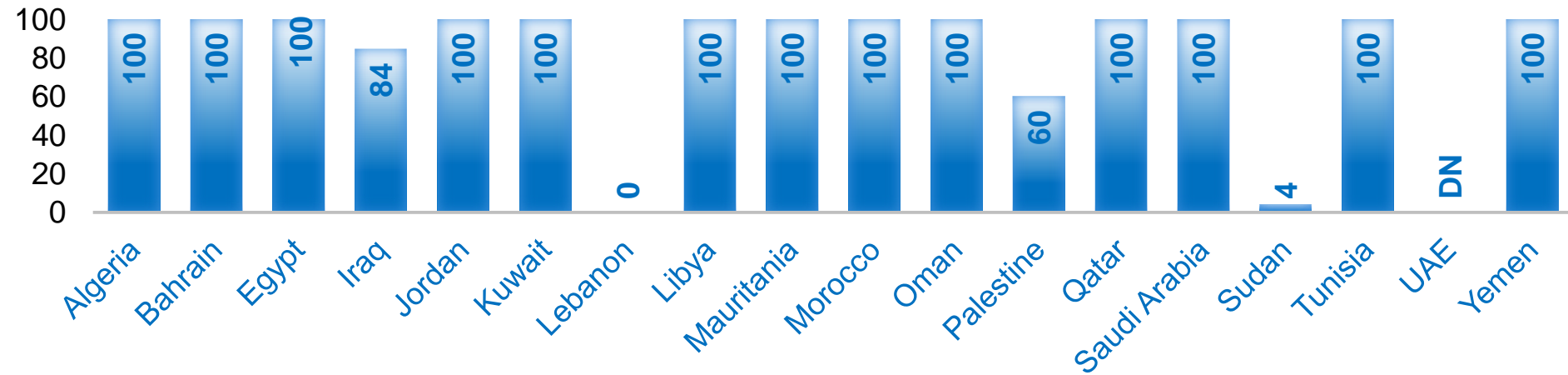
%

Water that has been disinfected at the source (%)

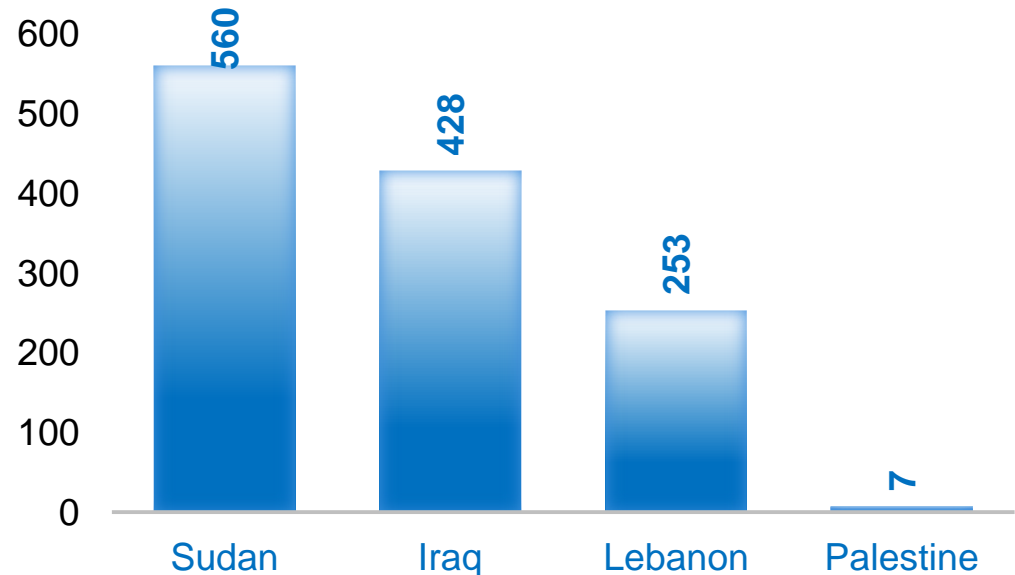


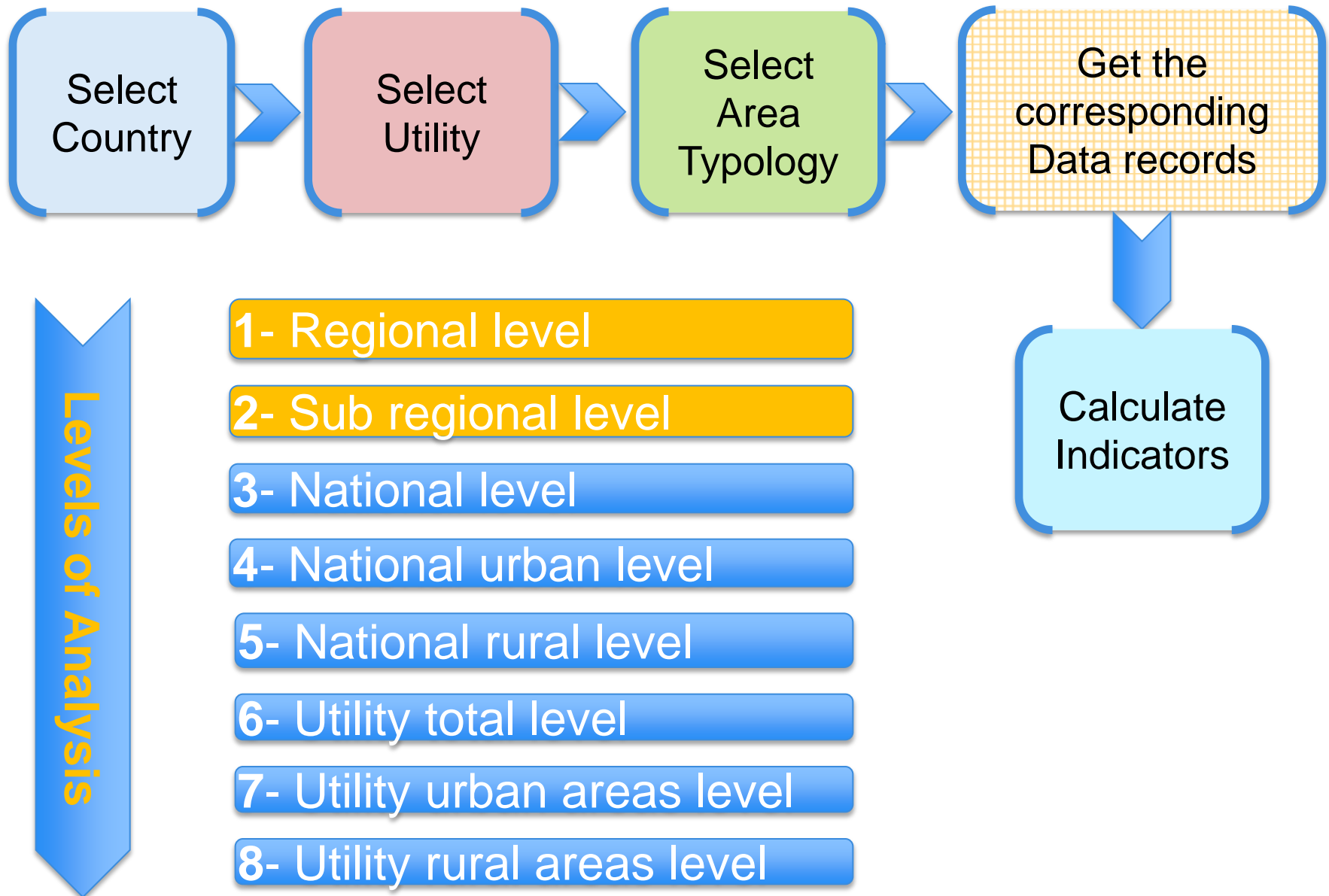


Proportion of population connected to piped water network billed a volumetric tariff (%)



Volume of water billed based on flat tariff in selected Arab countries (million cubic meters/year)





# THANK YOU

Economic And Social Commission For Western Asia



UNITED NATIONS

الاسكوا

ESCWA

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**Water and Sanitation Expert**  
**Sustainable Development Policies Division**