



Computation of long-term annual renewable water resources (RWR) by country (in km³/year, average)

Lebanon

Internal RWR		
Precipitation (mm/year)	[1]	661
Area of the country (1000 ha)	[2]	1 045
Precipitation (km ³ /year)	[3]	6.907 $=([1]/1000000) \times ([2] \times 10)$
Surface water: produced internally	[4]	4.1
Groundwater: produced internally	[5]	3.2
Overlap between surface water and groundwater	[6]	2.5 (a)
Total internal renewable water resources	[7]	4.8 $=[4]+[5]-[6]$
External RWR		
	Total	Accounted
<u>Surface water</u>		
Surface water entering the country	0	
Inflow not submitted to treaties		[8] 0
Inflow submitted to treaties		0
Inflow secured through treaties		[9] 0
Flow in border rivers	0.076	[10] 0.038
Accounted inflow		[11] 0.038 $=[8]+[9]+[10]$
Surface water leaving the country	0.575 (b)	
Outflow not submitted to treaties		0.16
Outflow submitted to treaties		0.415
Outflow secured through treaties		[12] 0.335 (c)
Total external renewable surface water		[13] -0.297 $=[11]-[12]$
<u>Groundwater</u>		
Groundwater entering the country	0	[14] 0
Groundwater leaving the country	0.28	0.28 (d)
Total external renewable water resources		[15] -0.297 $=[13]+[14]$
Total RWR		
Surface water		[16] 3.803 $=[4]+[13]$
Groundwater		[17] 3.2 $=[5]+[14]$
Overlap between surface water and groundwater		[6] 2.5 (a)
Total renewable water resources		[18] 4.503 $=[16]+[17]-[6]$
Dependency ratio (%)		[19] 0 $=100 \times ([11]+[14]) / ([11]+[14]+[7])$

Metadata:

- (a) Overlap between surface water and groundwater is groundwater produced internally minus estimated groundwater outflow into the sea (these are mostly the sub-marine springs of Chekka); it is equivalent to the base flow of the rivers.
 (b) Surface water outflow to the Syrian Arab Republic: 'El-Assi/Orontes 0.415 (actual 0.335); Hasbani to Israel 0.138 including 0.030 from Wazzani. Total to Israel: 0.160
 (c) Informal agreement between Lebanon and the Syrian Arab Republic leaves 0.080 of El-Assi/Orontes for Lebanon and the rest to the Syrian Arab Republic.
 (d) Groundwater outflow into Israel 0.150 (Hulah Lake); into the Syrian Arab Republic 0.130 (Dan springs)