



Computation of long-term annual renewable water resources (RWR) by country (in km<sup>3</sup>/year, average)

**Saudi Arabia**

Internal RWR		
Precipitation (mm/year)	[1] <input type="text" value="59"/> (a)	
Area of the country (1000 ha)	[2] <input type="text" value="214 969"/>	
Precipitation (km <sup>3</sup> /year)	[3] <input type="text" value="126.8"/> =([1]/1000000)x([2]x10)	
Surface water: produced internally	[4] <input type="text" value="2.2"/>	
Groundwater: produced internally	[5] <input type="text" value="2.2"/> (b)	
Overlap between surface water and groundwater	[6] <input type="text" value="2"/> (c)	
<b>Total internal renewable water resources</b>	[7] <input type="text" value="2.4"/> =([4]+[5]-[6])	
External RWR		
	Total	Accounted
<u>Surface water</u>		
Surface water entering the country	<input type="text" value="0"/>	
Inflow not submitted to treaties		[8] <input type="text" value="0"/>
Inflow submitted to treaties		<input type="text" value="0"/>
Inflow secured through treaties		[9] <input type="text" value="0"/>
Flow in border rivers	<input type="text" value="0"/>	[10] <input type="text" value="0"/>
Accounted inflow		[11] <input type="text" value="0"/> =([8]+[9]+[10])
Surface water leaving the country	<input type="text"/>	
Outflow not submitted to treaties		<input type="text"/>
Outflow submitted to treaties		<input type="text"/>
Outflow secured through treaties		[12] <input type="text" value="0"/>
Total external renewable surface water		[13] <input type="text" value="0"/> =([11]-[12])
<u>Groundwater</u>		
Groundwater entering the country	<input type="text" value="0"/>	[14] <input type="text" value="0"/>
Groundwater leaving the country	<input type="text" value="0.394"/> (d)	<input type="text" value="0.394"/>
<b>Total external renewable water resources</b>		[15] <input type="text" value="0"/> =([13]+[14])
Total RWR		
Surface water		[16] <input type="text" value="2.2"/> =([4]+[13])
Groundwater		[17] <input type="text" value="2.2"/> =([5]+[14])
Overlap between surface water and groundwater		[6] <input type="text" value="2"/> (c)
<b>Total renewable water resources</b>		[18] <input type="text" value="2.4"/> =([16]+[17]-[6])
Dependency ratio (%)		[19] <input type="text" value="0"/> =100*([11]+[14])/([11]+[14]+[7])

Metadata:

(a) From national consultant (Yousef Al-Dakheel): Volume is 245.5 km<sup>3</sup>/year, which is equal to 114 mm/year. FAO, 1997, gave 59 mm/year.

(b) 1.0 recharges the "usable" aquifers.

(c) Overlap between surface water and groundwater, estimated by J. Margat, is nearly 100% of groundwater recharge; It is an arid country; surface water is mostly flood water it infiltrates into the aquifers.

(d) To Kuwait 0.02; to Bahrain 0.112; to Qatar 0.002; to Jordan 0.18; to Iraq 0.08 (Umm er Radhuma).