



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

South Africa

Internal RWR		
Precipitation (mm/year)	[1]	495
Area of the country (1000 ha)	[2]	121 909
Precipitation (km ³ /year)	[3]	603.4 =([1]/1000000)x([2]x10)
Surface water: produced internally	[4]	43
Groundwater: produced internally	[5]	4.8
Overlap between surface water and groundwater	[6]	3 (a)
Total internal renewable water resources	[7]	44.8 =[4]+[5]-[6]
External RWR		
	Total	Accounted
<u>Surface water</u>		
Surface water entering the country	6.6 (b)	
Inflow not submitted to treaties		[8] 4.392
Inflow submitted to treaties		2.208
Inflow secured through treaties		[9] 2.208 (c)
Flow in border rivers	0	[10] 0
Accounted inflow		[11] 6.6 =[8]+[9]+[10]
Surface water leaving the country	10.85 (d)	
Outflow not submitted to treaties		10.55
Outflow submitted to treaties		0.05
Outflow secured through treaties		[12] 0.05 (e)
Total external renewable surface water		[13] 6.55 =[11]-[12]
<u>Groundwater</u>		
Groundwater entering the country	0	[14] 0
Groundwater leaving the country	0	0
Total external renewable water resources		[15] 6.55 =[13]+[14]
Total RWR		
Surface water	[16]	49.55 =[4]+[13]
Groundwater	[17]	4.8 =[5]+[14]
Overlap between surface water and groundwater	[6]	3 (a)
Total renewable water resources	[18]	51.35 =[16]+[17]-[6]
Dependency ratio (%)	[19]	12.84 =100*([11]+[14])/([11]+[14]+[7])

Metadata:

(a) Overlap is less than 100% of groundwater (GW) recharge; most GW is drained by the rivers (equals low flow of water courses). But part of South Africa is in the arid zone and some gw escapes and evaporates or flows out into the sea.

(b) FROM: Botswana: 0.6/2 (Limpopo (border)); Lesotho: 5.2; Swaziland: 1.1

(c) South Africa receives an increasing, guaranteed amount of water, from 0.057 km³/yr in 1995 to 2.208 km³/yr in 2020.

(d) FROM: Swaziland: 1.1 (Name?); Lesotho: 5.2 (Orange); Botswana: 0.6/2 (Limpopo [border- ZAF/ZWE])

(e) Orange R. to Namibia. Used to be 0.5+0.6 until 2007/12/31