



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

## Egypt

Internal RWR		
Precipitation (mm/year)	[1]	18.1
Area of the country (1000 ha)	[2]	100 145
Precipitation (km <sup>3</sup> /year)	[3]	18.13 =([1]/1000000)x([2]x10)
Surface water: produced internally	[4]	0.5
Groundwater: produced internally	[5]	0.5 (a)
Overlap between surface water and groundwater	[6]	0 (b)
<b>Total internal renewable water resources</b>	[7]	1 =([4]+[5]-[6])
External RWR		
	Total	Accounted
<u>Surface water</u>		
Surface water entering the country	84	
Inflow not submitted to treaties		[8] 0
Inflow submitted to treaties		84
Inflow secured through treaties		[9] 55.5 (c)
Flow in border rivers	0	[10] 0
Accounted inflow		[11] 55.5 =([8]+[9]+[10]) (d)
Surface water leaving the country	0	
Outflow not submitted to treaties		0
Outflow submitted to treaties		0
Outflow secured through treaties		[12] 0
Total external renewable surface water		[13] 55.5 =([11]-[12])
<u>Groundwater</u>		
Groundwater entering the country	1 (e)	[14] 1
Groundwater leaving the country	0	0
<b>Total external renewable water resources</b>		[15] 56.5 =([13]+[14])
Total RWR		
Surface water	[16]	56 =([4]+[13]) (f)
Groundwater	[17]	1.5 =([5]+[14])
Overlap between surface water and groundwater	[6]	0 (b)
<b>Total renewable water resources</b>	[18]	57.5 =([16]+[17]-[6])
Dependency ratio (%)	[19]	98.26 =100*([11]+[14])/([11]+[14]+[7])

Metadata:

- (a) The groundwater resources are in aquifers in the western desert independent from the Nile. The value differs according to the sources, for example 1.3 km<sup>3</sup>/yr in FAO/AQUASTAT Booklet 1997 revised in 2002 based on Amer 1999.
- (b) 0 or negligible. Most of Groundwater is in desert area independent from the Nile system (flows out into the sea, or to a closed basin). Some springs ->negligible. Between the Nile and the aquifers to the Nile->may be exchanges in both directions.
- (c) Inflow from Sudan according to the agreement between pre-2011 Sudan and Egypt is 65.5 at the border between Sudan and Egypt. Is equal to the outflow of the Aswan dam of 55.5, since the evaporation of the reservoir behind the Aswan dam is estimated at 10.
- (d) Large difference between natural and actual external resources since by agreement only part of the Nile flow is available for Egypt. Egypt is very dependant upon its neighbours for water (dependency ratio 97%).
- (e) Nubian aquifer from Sudan
- (f) In some references the total is higher as it includes the figure of wastewater reuse and agricultural drainage water, which either flows back into the river system or goes to the groundwater through seepage.