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

Iran (Islamic Republic of)

Internal RWR

Precipitation (mm/year)	[1]	228	
Area of the country (1000 ha)	[2]	174 515	
Precipitation (km³/year)	[3]	397.9	=([1]/1000000)x([2]x10)
Surface water: produced internally	[4]	97.3	
Groundwater: produced internally	[5]	49.3	
Overlap between surface water and groundwater	[6]	18.1	(a)
Total internal renewable water resources	[7]	128.5	=[4]+[5]-[6]

External RWR

		Total		Accounted	
Surface water					
Surface water entering the country		7.77	(b)		
Inflow not submitted to treaties	[8]			6.2	
Inflow submitted to treaties				1.57	
Inflow secured through treaties	[9]			0.82	(c)
Flow in border rivers	[10]	4.63		2.315	(d)
Accounted inflow	[11]			9.335	=[8]+[9]+[10]
Surface water leaving the country		18.67	(e)		
Outflow not submitted to treaties				17.5	(f)
Outflow submitted to treaties				1.17	(g)
Outflow secured through treaties	[12]			0.79	(h)
Total external renewable surface water	[13]			8.545	=[11]-[12]
Groundwater					
Groundwater entering the country	[14]	0		0	
Groundwater leaving the country		0		0	
Total external renewable water resources	[15]			8.545	=[13]+[14]

Total RWR

Surface water	[16]	105.8	=[4]+[13]
Groundwater	[17]	49.3	=[5]+[14]
Overlap between surface water and groundwater	[6]	18.1	(a)
Total renewable water resources	[18]	137	=[16]+[17]-[6]
Dependency ratio (%)	[19]	6.773	=100*([11]+[14])/([11]+[14]+[7])

Metadata:

(a) Overlap between surface water and groundwater is estimated to be around 40% of the groundwater recharge as some groundwater flows directly into the sea.
(b) Helmand from Afghanistan 6.7; Hari Rod (Tedzhen) from Afghanistan 1.07 (in fact becomes border, but because of treaty between the Islamic Republic of Iran and Turkmenistan considered to be incoming).
(c) An agreement existed with Afghanistan to use 26 m3/s (or 0.82 km3/yr) of the Helmand river, which ceased however with the Taliban regime; an agreement exists with Turkmenistan on Harid Rod, allocating 0.75 to Turkmenistan, leaving 0.32 for the Islamic Republic of Iran.
(d) 50% of flow
(e) Araks to Azerbaijan 7.5; affluents of Tigris to Iraq 10; Hari/Rod-Tedzhen to Turkmenistan 1.07; Atrek to Turkmenistan 0.1.
(f) Araks to Azerbaijan 7.5; affluents of Tigris to Iraq 10. There is also an outflow to Iraq of 24.7 by the Karun. However, this river flows into the Shatt Al Arab just beofre reaching the sea and is therefore of no use to Iraq and thus not counted.
(g) Tedzhen to Turkmenistan 1.07; Atrek to Turkmenistan 0.1.
(h) Tedzhen to Turkmenistan 0.75; Atrek to Turkmenistan 0.04.