



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

Kazakhstan

Internal RWR		
Precipitation (mm/year)	[1] <input style="width: 100px;" type="text" value="250"/>	
Area of the country (1000 ha)	[2] <input style="width: 100px;" type="text" value="272 490"/>	
Precipitation (km ³ /year)	[3] <input style="width: 100px;" type="text" value="681.2"/> =([1]/1000000)x([2]x10)	
Surface water: produced internally	[4] <input style="width: 100px;" type="text" value="56.5"/> (a)	
Groundwater: produced internally	[5] <input style="width: 100px;" type="text" value="33.85"/> (b)	
Overlap between surface water and groundwater	[6] <input style="width: 100px;" type="text" value="26"/> (c)	
Total internal renewable water resources	[7] <input style="width: 100px;" type="text" value="64.35"/> =([4]+[5]-[6])	
External RWR		
	Total	Accounted
<u>Surface water</u>		
Surface water entering the country	<input style="width: 100px;" type="text" value="72.04"/> (d)	
Inflow not submitted to treaties		[8] <input style="width: 100px;" type="text" value="32.03"/>
Inflow submitted to treaties		<input style="width: 100px;" type="text" value="40.01"/> (e)
Inflow secured through treaties		[9] <input style="width: 100px;" type="text" value="12.03"/> (f)
Flow in border rivers	<input style="width: 100px;" type="text" value="0"/>	[10] <input style="width: 100px;" type="text" value="0"/>
Accounted inflow		[11] <input style="width: 100px;" type="text" value="44.06"/> =([8]+[9]+[10])
Surface water leaving the country	<input style="width: 100px;" type="text" value="40.33"/> (g)	
Outflow not submitted to treaties		<input style="width: 100px;" type="text" value="40.33"/>
Outflow submitted to treaties		<input style="width: 100px;" type="text" value="0"/>
Outflow secured through treaties		[12] <input style="width: 100px;" type="text" value="0"/>
Total external renewable surface water		[13] <input style="width: 100px;" type="text" value="44.06"/> =([11]-[12])
<u>Groundwater</u>		
Groundwater entering the country	<input style="width: 100px;" type="text" value="0"/>	[14] <input style="width: 100px;" type="text" value="0"/>
Groundwater leaving the country	<input style="width: 100px;" type="text" value=""/>	<input style="width: 100px;" type="text" value=""/>
Total external renewable water resources		[15] <input style="width: 100px;" type="text" value="44.06"/> =([13]+[14])
Total RWR		
Surface water	[16] <input style="width: 100px;" type="text" value="100.6"/> =([4]+[13])	
Groundwater	[17] <input style="width: 100px;" type="text" value="33.85"/> =([5]+[14])	
Overlap between surface water and groundwater	[6] <input style="width: 100px;" type="text" value="26"/> (c)	
Total renewable water resources	[18] <input style="width: 100px;" type="text" value="108.4"/> =([16]+[17]-[6])	
Dependency ratio (%)	[19] <input style="width: 100px;" type="text" value="40.64"/> =100*([11]+[14])/([11]+[14]+[7])	

Metadata:

- (a) Syr Darya 3.3 (Ref:UNDP. 2004. Water resources of Kazakhstan in the new millennium.); Balkhash-Alakol 16.4; Chu-Talas-Assa 1.2; Irtys 24.5; Nura-Sarysu 1.7; Ishim 2.6; Tobol-Torgai 1.5; Ural-Caspian 5.3.
- (b) 626 groundwater fields explored with total reserves of 15.93 km³/year; reserves with salinity rate up to 1 g/l are 33.85 km³/year; reserves with salinity rate up to 10 g/l are 57.63 km³/year (Ref: UNDP. 2004. Water resources of Kazakhstan in the new millenium). In 1993, the part of groundwater resources which could be extracted from existing pumping facilities was estimated at 6.1 km³/year.
- (c) Overlap between surface water and groundwater considered negligible.
- (d) Syr Darya from UZB 33.27 (of which 27.42 from KGZ and 1.01 from TJK); Balkhash-Alakol 13.3 (12.94 from CHN, 0.36 from KGZ); Chu from KGZ 5; Talas-Assa from KGZ 1.74; Irtys from CHN (Ertix) 9.53; Tobol-Torgai from RUS 0.6; Ural-Caspian from RUS 8.6.
- (e) Syr Darya 33.27; Chu 5; Talas-Assa 1.74.
- (f) Syr Darya 10 (agreement on total between all countries: Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan); Chu-Talas-Assa from Kyrgyzstan 2.03, of which 1.24 from Chu and 0.79 from Talas and Assa.
- (g) To Russian Federation 38.0; to China 2.327.