



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

## Niger

Internal RWR		
Precipitation (mm/year)	[1]	151
Area of the country (1000 ha)	[2]	126 700
Precipitation (km <sup>3</sup> /year)	[3]	191.3 = $\frac{[1]}{1000000} \times [2] \times 10$
Surface water: produced internally	[4]	1
Groundwater: produced internally	[5]	2.5
Overlap between surface water and groundwater	[6]	0 (a)
<b>Total internal renewable water resources</b>	[7]	3.5 = $[4]+[5]-[6]$
External RWR		
	Total	Accounted
<u>Surface water</u>		
Surface water entering the country	29.2	
Inflow not submitted to treaties		[8] 29.2
Inflow submitted to treaties		0
Inflow secured through treaties		[9] 0
Flow in border rivers	2.7	[10] 1.35 (b)
Accounted inflow		[11] 30.55 = $[8]+[9]+[10]$
Surface water leaving the country	32.4	
Outflow not submitted to treaties		32.4
Outflow submitted to treaties		0
Outflow secured through treaties		[12] 0
Total external renewable surface water		[13] 30.55 = $[11]-[12]$
<u>Groundwater</u>		
Groundwater entering the country	0	[14] 0
Groundwater leaving the country	0	0
<b>Total external renewable water resources</b>		[15] 30.55 = $[13]+[14]$
Total RWR		
Surface water		[16] 31.55 = $[4]+[13]$
Groundwater		[17] 2.5 = $[5]+[14]$
Overlap between surface water and groundwater		[6] 0 (a)
<b>Total renewable water resources</b>		[18] 34.05 = $[16]+[17]-[6]$
Dependency ratio (%)		[19] 89.72 = $\frac{100 \times ([11]+[14])}{([11]+[14]+[7])}$

Metadata:

- (a) Overlap is 0. Niger is in the arid zone; most of the groundwater escapes from the river systems and flows out into closed basins and evaporates in arid areas. There may be some springs, but it is negligible.  
 (b) Border river is an affluent of the Sokoto between Benin/Nigeria. the 50% is applied.