

Indicator name Agriculture water withdrawals as share of total water withdrawals									
Region	Renewable water resources	Total water withdrawals	Water withdrawals						Withdrawals as percent of renewable resources
			Agriculture		Industry		Domestic (urban)		
			Amount	Percent	Amount	Percent	Amount	Percent	
Africa	3,936	217	186	86	9	4	22	10	5.5
Asia	11,594	2,378	1,936	81	270	11	172	7	20.5
Latin America	13,477	252	178	71	26	10	47	19	1.9
Caribbean	93	13	9	69	1	8	3	23	14.0
North America	6,253	525	203	39	252	48	70	13	8.4
Oceania	1,703	26	18	73	3	12	5	19	1.5
Europe	6,603	418	132	32	223	53	63	15	6.3
World	43,659	3,829	2,663	70	784	20	382	10	8.8
(Cubic kilometres per year unless otherwise indicated) Based on 2000 data									
Prepared by	FAO								
Example	WWDR3, Chapter 7, Table 7.1								
Rationale	To have a measure of the importance of agriculture, especially irrigation, in the country's water balance.								
Position in DPSIR chain	Pressure								
Definition of indicator	Proportion of renewable water resources used for irrigated agriculture								
Underlying definitions and concepts	<p>Renewable water resources include all surface water and groundwater resources that are renewed on a yearly basis without consideration of the capacity to harvest and use this resource.</p> <p>Exploitable water resources, which refer to the surface water or groundwater that is available with an occurrence of 90% of the time, are considerably less than renewable water resources, but no universal method exists to assess such exploitable water resources. This concept varies according to: (1) natural conditions that may ease or not the development of water resources (regularity of the water regime, fragmentation of the hydrographic or hydrogeological systems, convenience of the sites for dams, water quality); (2) objectives of water use that will determine the acceptability of internal and external costs of development and management; it also involves arbitration for allocation between in-situ use (reservation) and ex-situ use; and (3) other constraints, such as geopolitical constraints in the case of shared resources, including upstream limitations, or reservations for downstream use.</p> <p>Agricultural water withdrawal refers to the quantity of water withdrawn for all agricultural purposes. It includes irrigation and livestock watering.</p>								
Specification of determinants needed	Water withdrawal for agriculture (AWW) Renewable water resources (RWR)								
Computation	100 (AWW/RWR)								
Units of measurements	Percent								
Data sources, availability and quality	IWMI CAWMA http://www.iwmi.cgiar.org/assessment/ (Accessed 02 March 2009) FAO AQUASTAT								
Scale of application	All scales; data available at country level. Relevant also at basin level								
Geographical coverage	Global								
Interpretation	Knowing the importance of agriculture in the consumption of water resources will give an indication of the vulnerability of this sector and the economy to any variability in water supplies.								

Linkage with other indicators	Irrigated land as a percentage of cultivated land Relative importance of agriculture in the country's economy
Alternative methods and definitions	Constraints to computation of this indicator lie in: <ul style="list-style-type: none"> ▪ Definition of water resources ▪ Estimation of agricultural water use; raw data measurements not available which illustrates the need for modeling. Methods for computing agricultural water withdrawal vary from country to country. The figure could be reviewed for each country on the basis of crop water requirements and irrigated areas, and comments should be added in the country profiles to explain the figure when necessary.
Related indicator sets	FAOSTAT
Sources of further information	http://www.fao.org/nr/water/aquastat/main/index.stm (Accessed 02 March 2009) www.fao.org/faostat/ (Accessed 02 March 2009)
Other institutions involved	ICID, IWMI