Aquastat FAO's Global Information System on Water and Agriculture

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Contents

SUMMARY

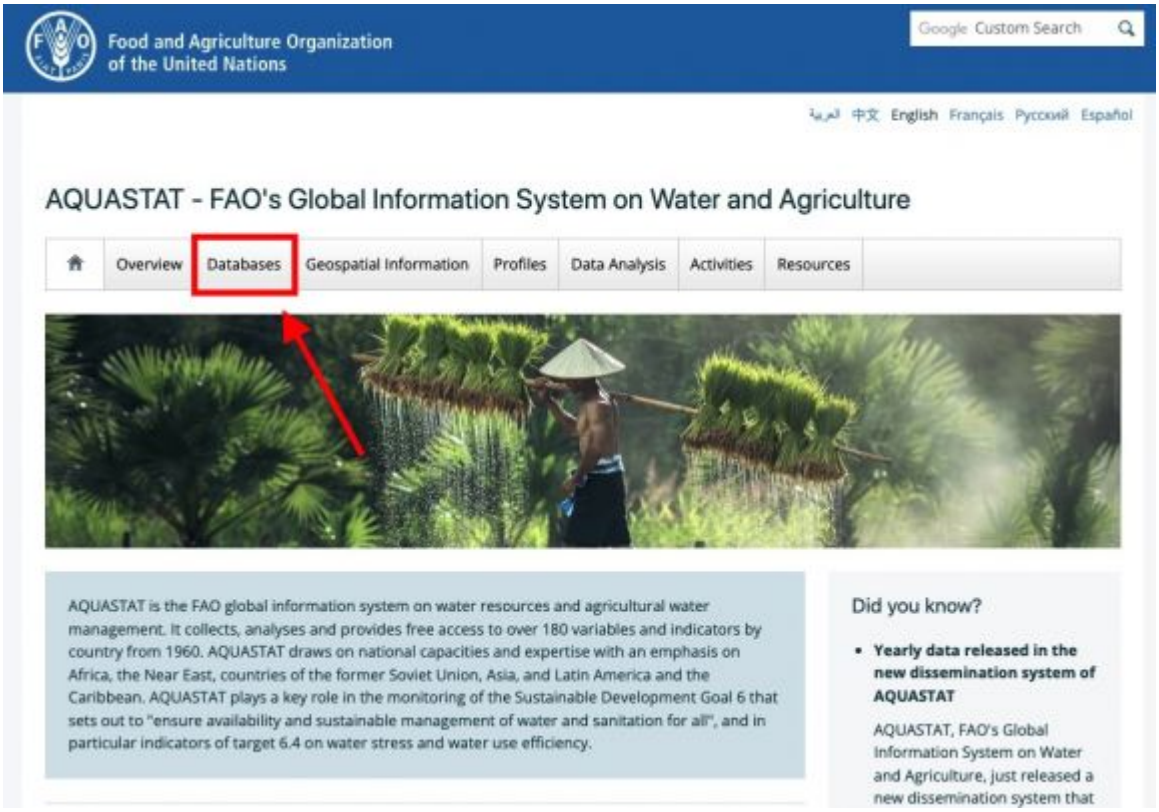
AQUASTAT is the UN's Food and Agriculture Organization (FAO) global information system on water resources and agricultural water management. It collects, analyzes, and provides free access to over 180 variables and indicators by country and year from 1960. AQUASTAT plays an important role in monitoring of the UN's Sustainable Development Goal 6 that sets out to "ensure availability and sustainable management of water and sanitation for all". Additionally, AQUASTAT's new dissemination system allows users to download up to 100,000 data points and the data is made available yearly.

The data team uses AQUASTAT for a number of series including SeriesDesalinatedWater, SeriesLandCultivatedArea, and SeriesLandIrWaterLogged to name a few. To pull data, please follow the instructions below.

GENERAL STEPS TO PULL DATA FROM AQUASTAT

Step 1.) Navigate to the home page of AQUASTAT FAO's Global Information System on Water and Agriculture,

Step 2.) Near the top of the page, click on the tab labeled "**Database**"



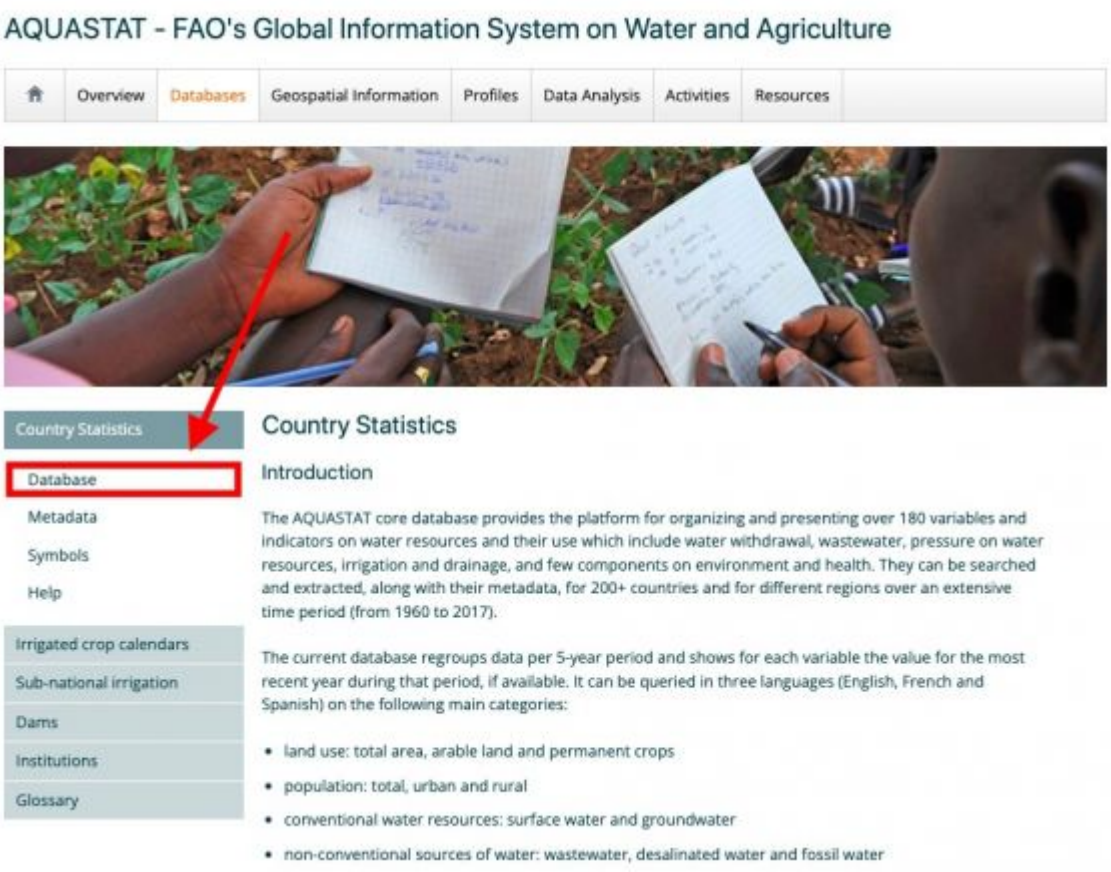
AQUASTAT's Homepage

Step 3.) On the left hand side of the page, click on the tab labeled "**Country Statistics**"

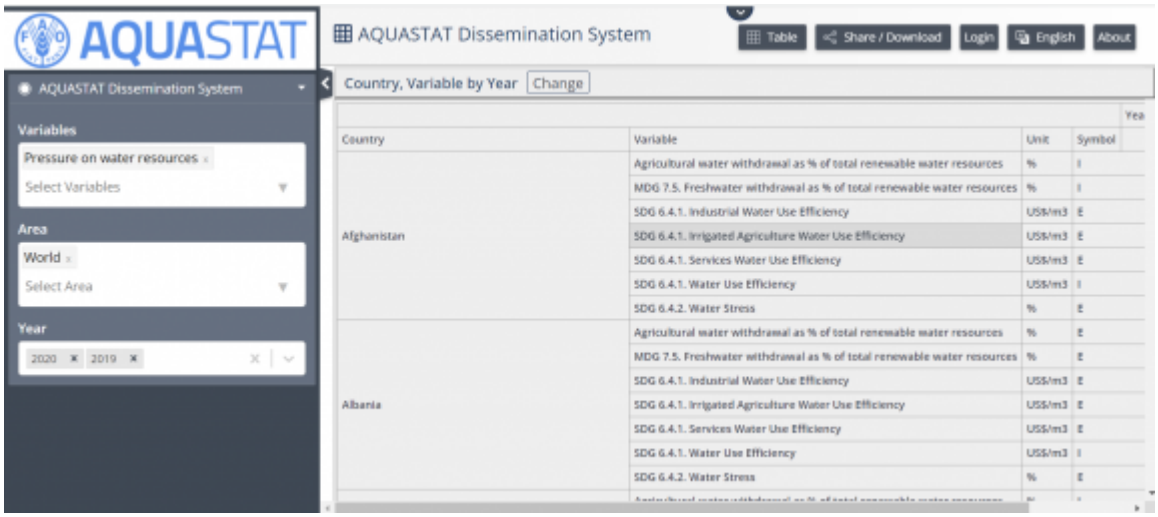
AQUASTAT's Database Homepage

Step 4.) On the left hand side of the page, click on the tab labeled "**Database**", under "Country Statistics"

THIS WILL OPEN A PAGE ON ANOTHER TAB

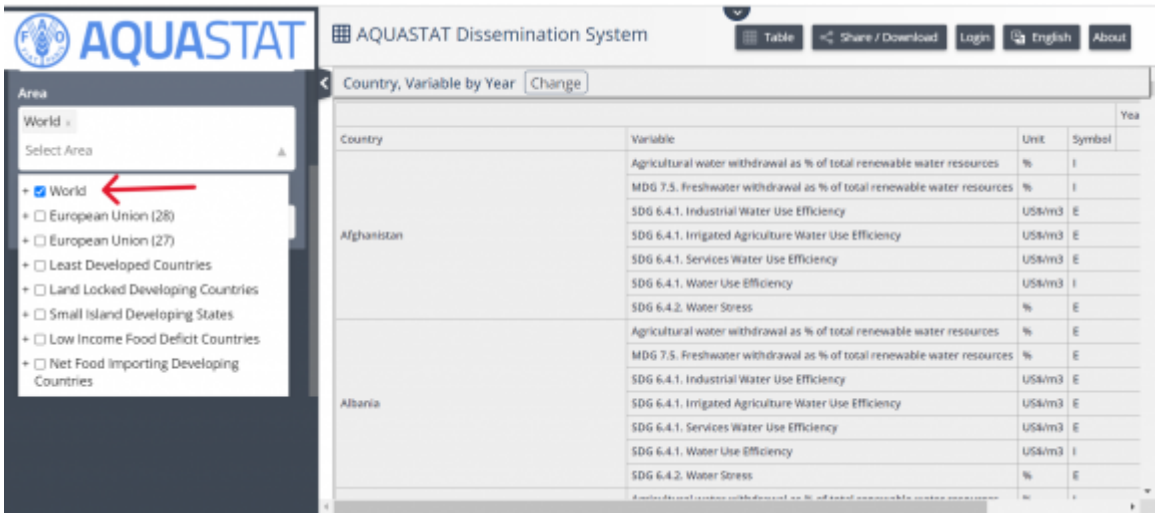


AQUASTAT's Country Statistics Page



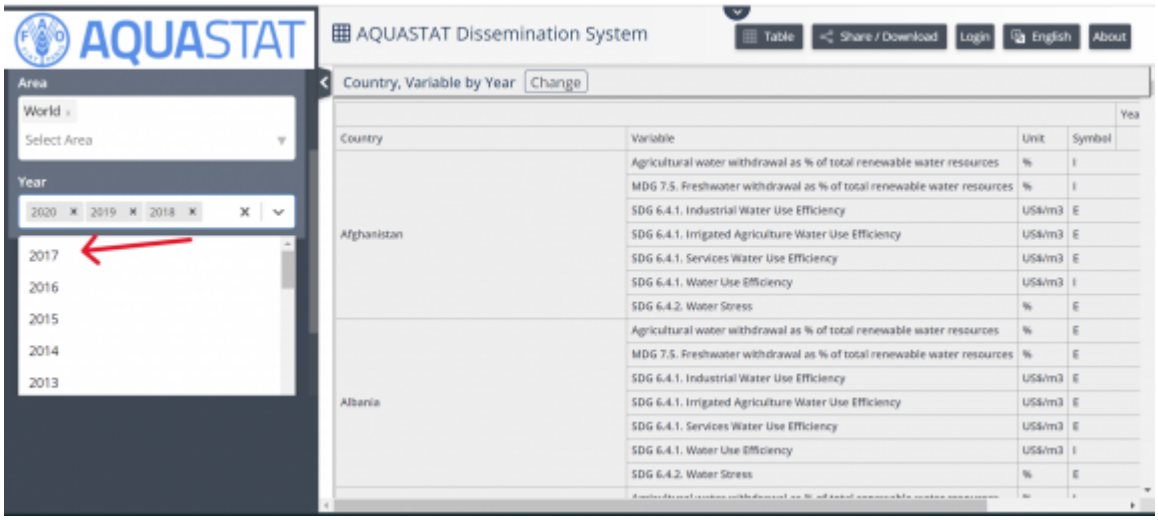
AQUASTAT Homepage

Step 5.) Under the "Areas" section on the left side, select **(World)** to select all countries. You can also select different regions.



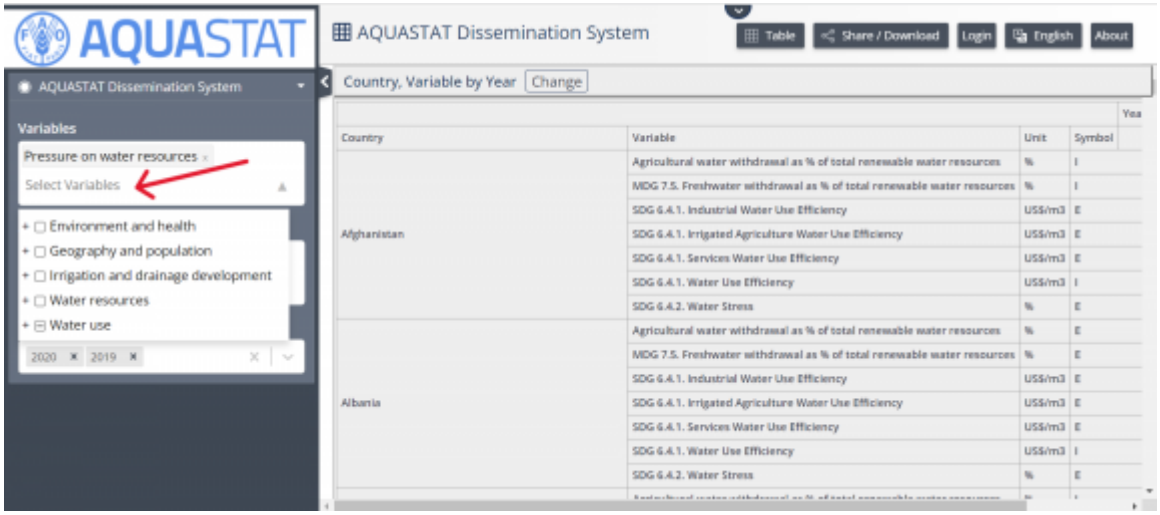
Select (World)

Step 6.) Under the "Year" section on the left, select each year to see it represented in the data.



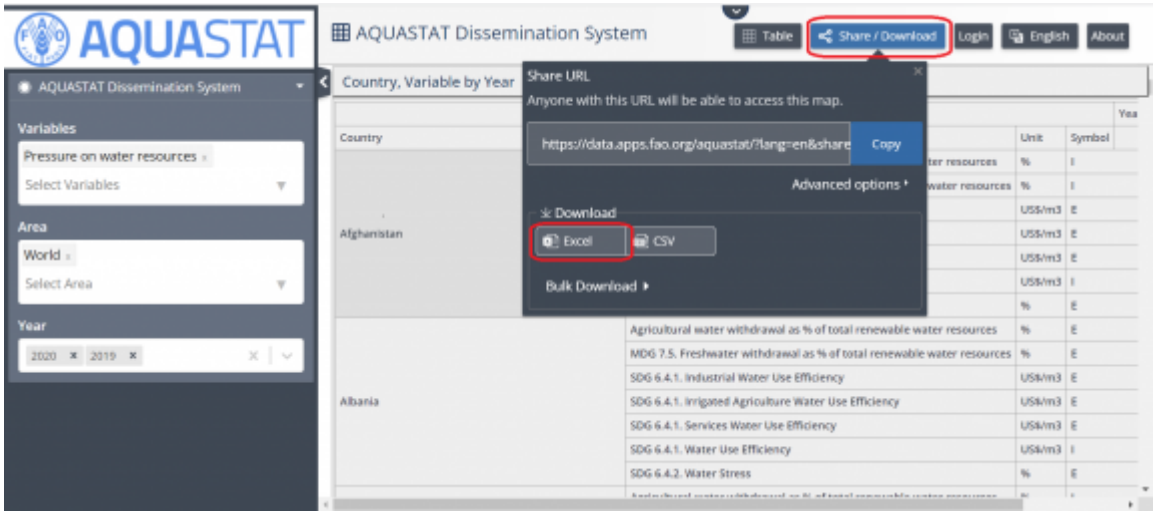
Select Years

Step 7.) To find your specific variable, click which "Variable Group" it is in, then the "Variable Subgroup", and finally your "Variable". You can also start typing your variable name in the "Select Variables" space and it will display that variable and similar ones.



The Variable Group of your Series

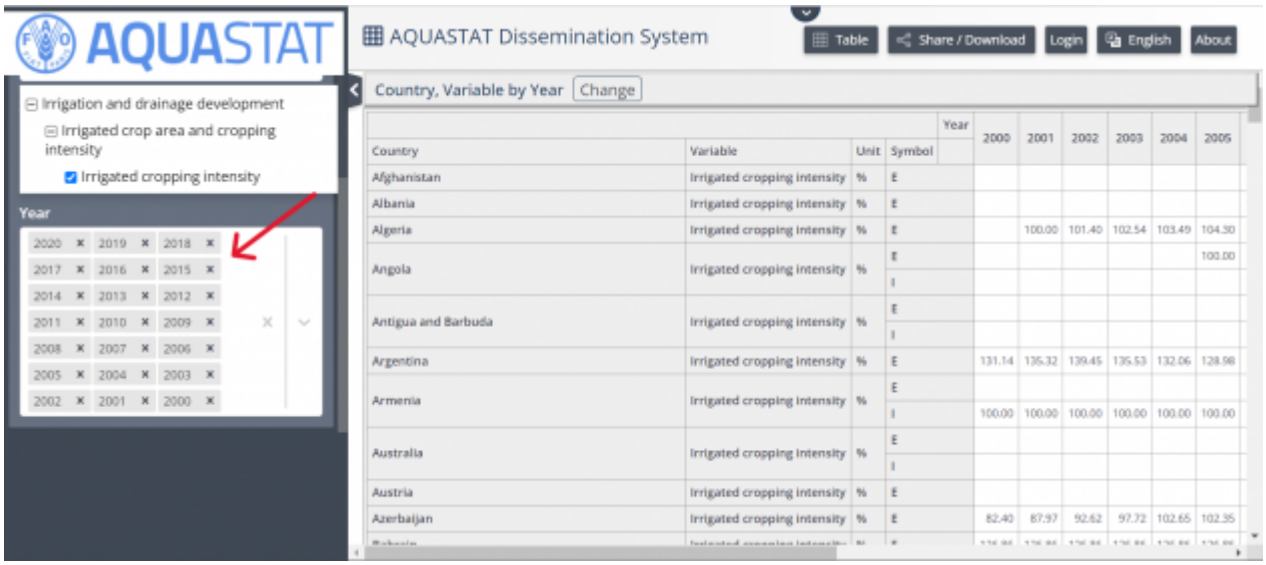
Step 8.) Download the data by clicking "Share/Download". You will then be given download options. Click "Excel". An Excel file will download. Now you can format the data to upload it into IFs. To import data into IFs, please follow the instructions found in the Importing Data (general instructions) page.



Select "Download"

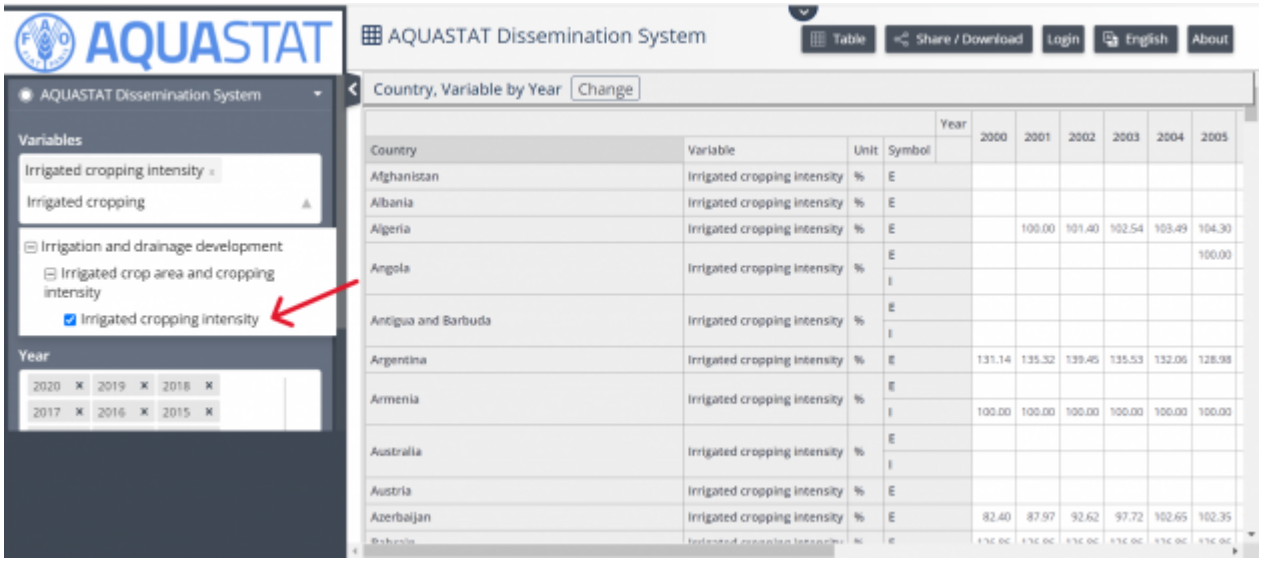
SPECIFIC VARIABLE EXAMPLE: SeriesIrrigatedCropIntensity

Step 9.) On the left hand side, under "Year", select desired years of data. This example will use years 2000-2020. "**Irrigation and drainage development**"



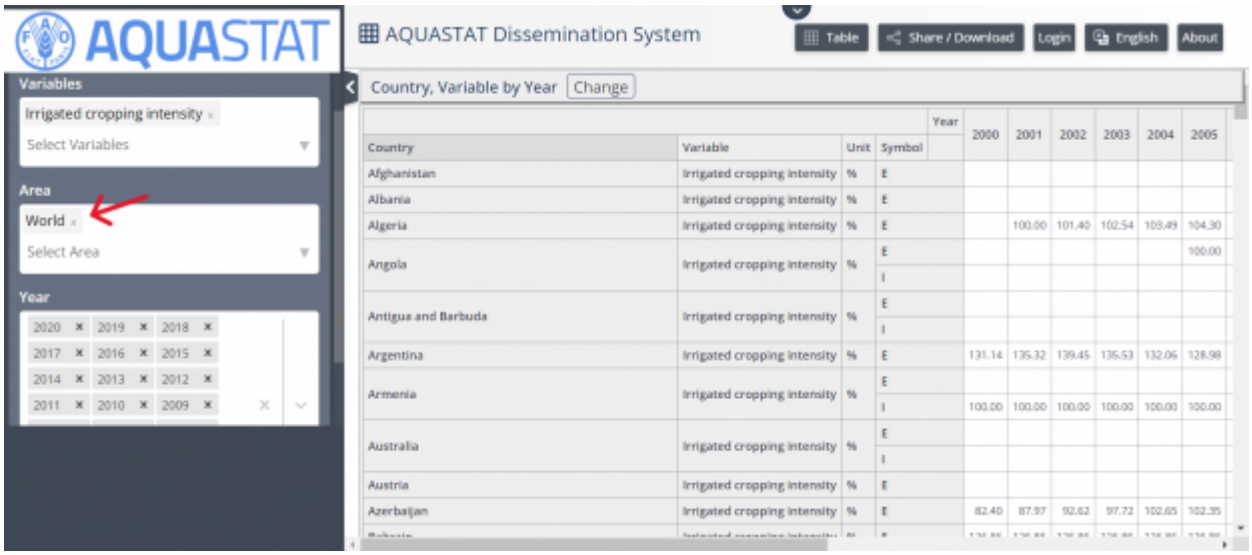
Select Years

Step 10.) Start typing **"Irrigated cropping intensity"** into the "Select Variable" box. **"Irrigated cropping intensity"** will be under variable group "Irrigation and drainage development" and variable subgroup "Irrigated crop area and cropping intensity". Select the variable and a blue check mark will appear.



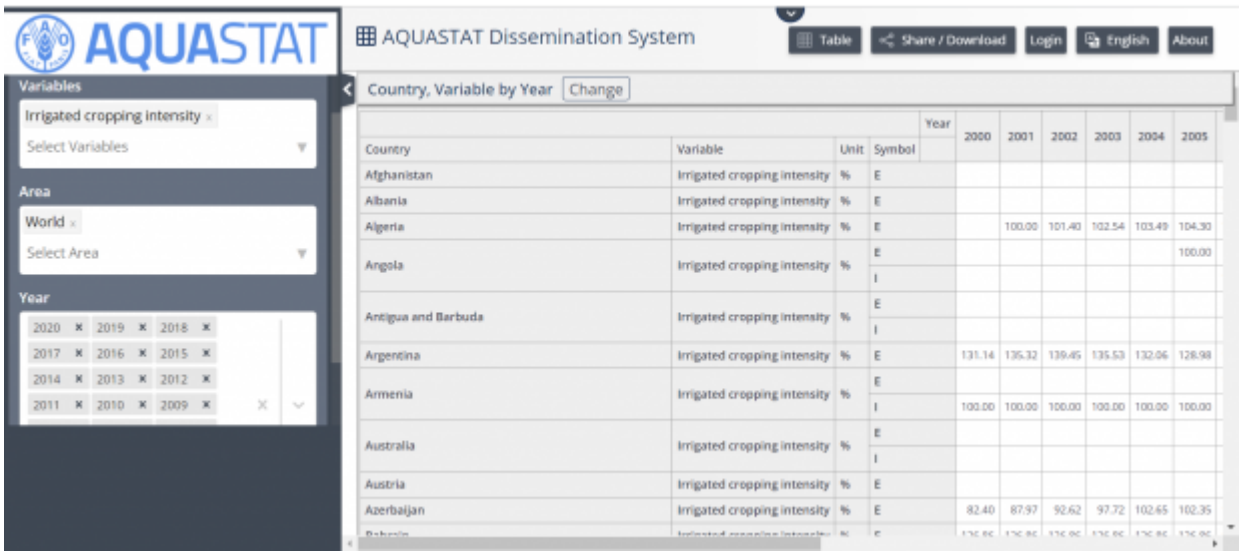
Select the Variable

Step 11.) To select all countries, make sure "World" is selected under "Area".



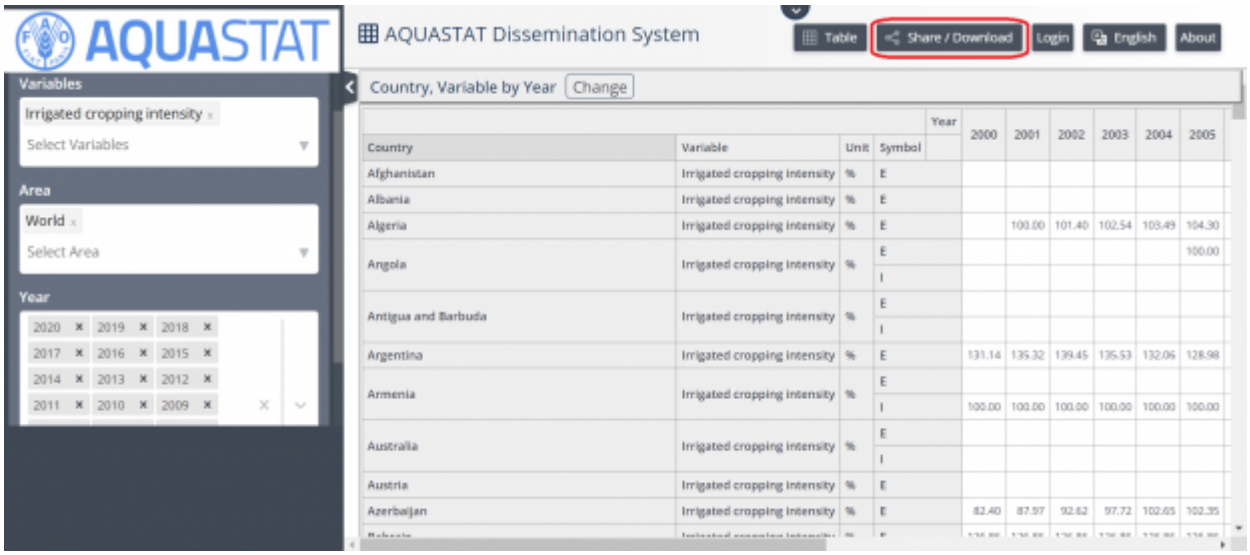
Select "World"

Step 11.) Data will now populate the page on the right side.



Data populates page

Step 12.) Select "Share/Download" and then select "Excel".



Click "Download"

Step 13.) An Excel sheet will download. Now you can format the data to upload it into IFs. To import data into IFs, please follow the instructions found in the Importing Data (general instructions) page

	A	B	C	D	E	F	G	H
1	Country	M49	Year	Variable	Unit	value	Symbol	Symbol Description
2	Afghanistan	4	2019	Irrigated cro	%	100.508083	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
3	Afghanistan	4	2018	Irrigated cro	%	100.508083	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
4	Afghanistan	4	2017	Irrigated cro	%	100.508083	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
5	Afghanistan	4	2016	Irrigated cro	%	100.508083	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
6	Afghanistan	4	2015	Irrigated cro	%	99.9540652	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
7	Afghanistan	4	2014	Irrigated cro	%	104.015296	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
8	Afghanistan	4	2013	Irrigated cro	%	105.019305	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
9	Afghanistan	4	2012	Irrigated cro	%	106.457926	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
10	Afghanistan	4	2011	Irrigated cro	%	114.767932	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
11	Albania	8	2019	Irrigated cro	%	43.5302296	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
12	Albania	8	2018	Irrigated cro	%	44.1910499	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
13	Albania	8	2017	Irrigated cro	%	44.0017138	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
14	Albania	8	2016	Irrigated cro	%	44.4204152	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
15	Albania	8	2015	Irrigated cro	%	45.6444444	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
16	Albania	8	2014	Irrigated cro	%	49.0448902	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
17	Albania	8	2013	Irrigated cro	%	50.0243546	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
18	Albania	8	2012	Irrigated cro	%	50.1709819	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
19	Albania	8	2011	Irrigated cro	%	50.2446184	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
20	Albania	8	2010	Irrigated cro	%	50.2200489	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
21	Albania	8	2009	Irrigated cro	%	50.1220107	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
22	Albania	8	2008	Irrigated cro	%	87.1077184	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
23	Albania	8	2007	Irrigated cro	%	96.4319249	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
24	Albania	8	2006	Irrigated cro	%	100	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation
25	Algeria	12	2019	Irrigated cro	%	84.8023715	E	Estimate either calculated as sum or identify (yield) from official values or from an AQUASTAT estimation

Series pulled from the AQUASTAT

The latest data has been pulled from the report updated on April, 2024 which covers 184 economies. There are 60 series in total, 18 of them used in preprocessors and 42 of them are not in preprocessors.

The "Name in Source" is the "Variable" column in downloaded data.

Preprocessors

Variable	Definition	Units	Years	Name in Source	UsedInPreprocessor	UsedInPreprocessorFileName
WasterwaterTreated	Wastewater: treated volume (10^9 m3/yr)	10^9 m3/year	1964-2020	Treated municipal wastewater	1	WATER
WastewaterProduced	Wastewater: produced volume (10^9 m3/yr)	10^9 m3/year	1964-2020	Produced municipal wastewater	1	WATER
WastewaterTreatedReused	Treated wastewater reused (10^9 m3/yr)	10^9 m3/year	1964-2020	Treated municipal wastewater discharged (secondary water)	1	WATER
WaterDesalinated	Desalinated Water Produced	10^9 m3/year	1980-2020	Desalinated water produced	1	WATER
WaterGroundWithD	Ground Water Withdrawal	10^9 m3/year	1970-2020	Fresh groundwater withdrawal	1	WATER
WaterResExploitGround	Exploitable: regular renewable groundwater (10^9 m3/yr)	10^9 m3/year	1964-2020	Exploitable: regular renewable groundwater	1	WATER
WaterResExploitSurface	Exploitable: total renewable surface water (10^9 m3/yr)	10^9 m3/year	1964-2020	Exploitable: total renewable surface water	1	WATER
WaterResOverlap	Overlap between surface and groundwater	10^9 m3/year	1964-2020	Overlap between surface water and groundwater	1	WATER
WaterResTotalExploit	Water resources: total exploitable	10^9 m3/year	1964-2020	Total exploitable water resources	1	WATER
WaterResTotalRenew	Water resources: total renewable (actual)	10^9 m3/year	1964-2020	Total renewable water resources	1	WATER
WaterResTotalRenewGround	Total renewable groundwater (actual) (10^9 m3/yr)	10^9 m3/year	1964-2020	Total renewable groundwater	1	WATER
WaterResTotalRenewSurface	Total renewable suface water (actual)	10^9 m3/year	1964-2020	Total renewable surface water	1	WATER
WaterSurfaceWithD	Surface Water Withdrawal	10^9 m3/year	1970-2020	Fresh surface water withdrawal	1	WATER
WaterTotalWithdSector	Total water withdrawal (summed by sector)	10^9 m3/year	1964-2020	Total water withdrawal	1	WATER
WaterTotalWithdSources	Total water withdrawal (summed by sources)	10^9 m3/year	1964-2020	Total freshwater withdrawal	1	WATER
WaterWithdAgriculture	Agricultural water withdrawal	10^9 m3/year	1965-2020	Agricultural water withdrawal	1	WATER
WaterWithdIndustrial	Industrial water withdrawal	10^9 m3/year	1965-2020	Industrial water withdrawal	1	WATER
WaterWithdMunicipal	Municipal water withdrawal	10^9 m3/year	1965-2020	Municipal water withdrawal	1	WATER

Non-preprocessors

Variable	Definition	Units	Years	Name in Source
DesalinatedWater	Desalinated Water Produced	10^9 m3/year	1980-2020	Desalinated water produced
IrWaterReq	Irrigation water requirement	10^9 m3/year	1987-2020	Irrigation water requirement
IrWaterWith	Irrigation water withdrawal	10^9 m3/year	1970-2020	Irrigation water withdrawal
WasteWaterDirectNotTreated	Direct use of not treated municipal wastewater for irrigation purposes	10^9 m3/year	1985-2020	Direct use of not treated municipal wastewater for irrigation purposes
WastewaterIrDirectTreated	Direct use of treated municipal wastewater for irrigation purposes	10^9 m3/year	1994-2020	Direct use of treated municipal wastewater for irrigation purposes
WaterGroundEntering	Groundwater entering the country (natural)	10^9 m3/year	1964-2020	Groundwater: entering the country (total)
WaterGroundLeaving	Groundwater leaving the country (naturally)	10^9 m3/year	1964-2020	Groundwater: leaving the country to other countries (total)
WaterGroundProdInternal	Groundwater produced internally (natural)	10^9 m3/year	1964-2020	Groundwater produced internally
WaterGroundTotal	Groundwater total renewable	10^9 m3/year	1964-2020	Total renewable groundwater
WaterTotalWithd	Total water withdrawal (summed by sector)	10^9 m3/year	1964-2020	Total water withdrawal
LandCultivatedArea	Cultivated area (1000 ha)	1000 ha	1964-2020	Cultivated area (arable land + permanent crops)
LandEquipIrActual	Area equipped for irrigation: actually irrigated	1000 ha	1964-2020	Area equipped for irrigation: actually irrigated
LandEquipIrFullControl	Area equipped for full control irrigation: total	1000 ha	1964-2020	Area equipped for full control irrigation: total
LandEquipIrFullControlActual	Area equipped for full control irrigation: actually irrigated	1000 ha	1964-2020	Area equipped for full control irrigation: actually irrigated
LandIrAreaEquip	Area equipped for irrigation: total (1000 ha)	1000 ha	1964-2020	Area equipped for irrigation: total
LandIrAreaSalinized	Area salinized by irrigation (1000 ha)	1000 ha	1972-2020	Area salinized by irrigation
LandIrEquipActual	Area equipped for irrigation: actually irrigated (1000 ha)	1000 ha	1964-2020	Area equipped for irrigation: actually irrigated
LandIrEquipDrained	Area equipped for irrigation drained (1000 ha)	1000 ha	1985-2020	Area equipped for irrigation drained
LandIrEquipGround	Area equipped for irrigation by groundwater	1000 ha	1964-2020	Area equipped for irrigation by groundwater
LandIrEquipMixed	Area equipped for irrigation by mixed surface water and groundwater	1000 ha	1989-2020	Area equipped for irrigation by mixed surface water and groundwater
LandIrEquipSurface	Area equipped for irrigation by surface water	1000 ha	1964-2020	Area equipped for irrigation by surface water
LandIrHarvestedCropArea	Total harvested irrigated crop area (1000 ha)	1000 ha	1964-2020	Total harvested irrigated crop area (full control irrigation)
LandIrPotential	Irrigation potential (1000 ha)	1000 ha	1964-2020	Irrigation potential
LandIrWaterLogged	Area waterlogged by irrigation (1000 ha)	1000 ha	1980-2020	Area waterlogged by irrigation
WasteWaterLandEquipDirectNotTreated	Direct use of not treated municipal wastewater for irrigation purposes	1000 ha	1972-2020	Area equipped for irrigation by direct use of not treated municipal wastewater
WasteWaterLandEquipDirectTreated	Area equipped for irrigation by direct use of treated municipal wastewater	1000 ha	1971-2020	Area equipped for irrigation by direct use of treated municipal wastewater
WaterTotalAgManagedArea	Total agricultural water managed area	1000 ha	1964-2020	Total agricultural water managed area
WaterTotalRenewPC	Water resources: total renewable per capita (actual)	Cubic Meter	1964-2020	Total renewable water resources per capita
WaterTotalWithdPC	Total water withdrawal per capita	Cubic Meter	1964-2020	Total water withdrawal per capita
TotalDamCapacity	Total dam capacity (km3)	km3	1964-2020	Total dam capacity
IrrigatedCropIntensity	Irrigated Crop Intensity	Percent	1964-2020	Irrigated cropping intensity
LandIr%Grain	% of total grain production irrigated (%)	Percent	1984-2020	% of total grain production irrigated
LandIrActual%Equip	Area equipped for irrigation: actually irrigated, %	Percent	1964-2020	% of the area equipped for irrigation actually irrigated
LandIrEquip%Cultivated	% of cultivated area equipped for irrigation (%)	Percent	1964-2020	% of the cultivated area equipped for irrigation
LandIrEquip%Potential	% of irrigation potential equipped for irrigation (%)	Percent	1964-2020	% of irrigation potential equipped for irrigation
LandIrEquip%WaterManaged	% of agricultural water managed area equipped for irrigation (%)	Percent	1964-2020	% of agricultural water managed area equipped for irrigation
WaterDependencyRatio	Dependency ratio, percentage of total renewable water resources originating outside of the country	Percent	1964-2020	Dependency ratio
WaterWith%Agric	Water withdrawals, percent used in agriculture (1990=70-99;2000=update, mostly 2000)	Percent	1965-2020	Agricultural water withdrawal as % of total water withdrawal
WaterWith%Fresh	% of total actual renewable freshwater resources withdrawn (%)	Percent	1964-2020	MDG 7.5. Freshwater withdrawal as % of total renewable water resources
WaterWith%Household	Water withdrawals, percent used by households (1990=70-99;2000=update, mostly 2000)	Percent	1965-2020	Municipal water withdrawal as % of total withdrawal
WaterWith%Ind	Water withdrawals, percent used in industry (1990=70-99;2000=update, mostly 2000)	Percent	1965-2020	Industrial water withdrawal as % of total water withdrawal
WaterWithAgr%FreshAquastat	% of total actual renewable water resources withdrawn by agriculture (%)	Percent	1965-2020	Agricultural water withdrawal as % of total renewable water resources