

# Water and agriculture in the Mediterranean: an overview focusing on transboundary river basins

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# Water and agriculture in the Mediterranean

- ▶ Two specific features Mediterranean agriculture: climate and long agricultural history (wheat, oat, barley domestication)
- ▶ Emblematic species: olive trees and grape vine
- ▶ Irrigation development and improvement
- ▶ Mediterranean river basins: Northern concentration of rains, huge contrasts in availability
- ▶ 65% water use: agriculture; 48% North and 82% South
- ▶ « Water culture »: hydraulics; complex hydro-histories and water rights
- ▶ 1950, large scale hydraulics: dams, transfer canals
- ▶ Conflicts and water management

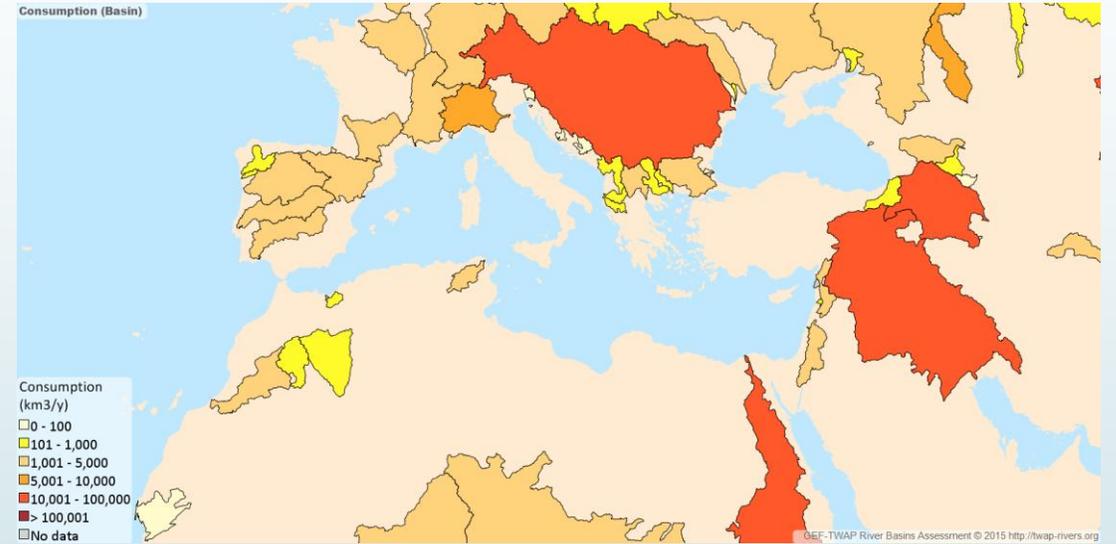
## Mediterranean Transboundary River Basins

More than 30 Transboundary river  
Basins (TRB)

Regional situation: Transboundary  
River Basins Assessment (TWAP, 2015)

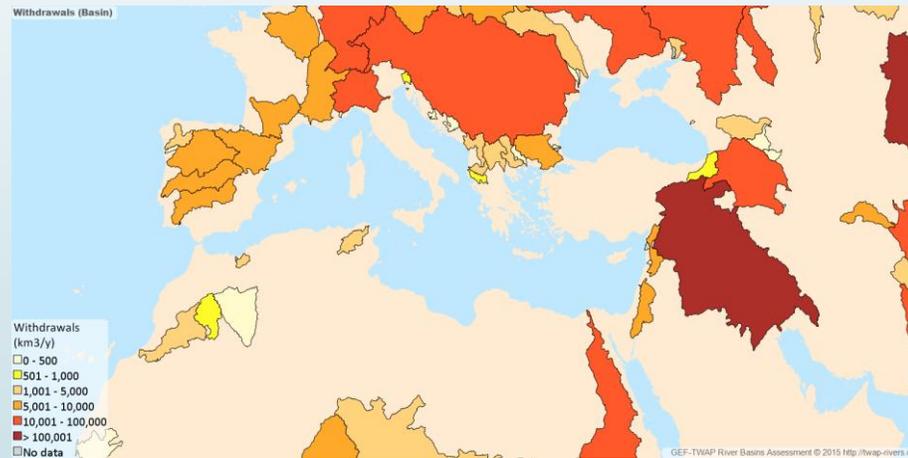
Selected indicators related to  
agriculture: current data and  
estimations

Data according to relative risk  
category per indicator or projected  
indicator in through two presentations:  
the TRB and the Basin Country Unit  
(BCU)

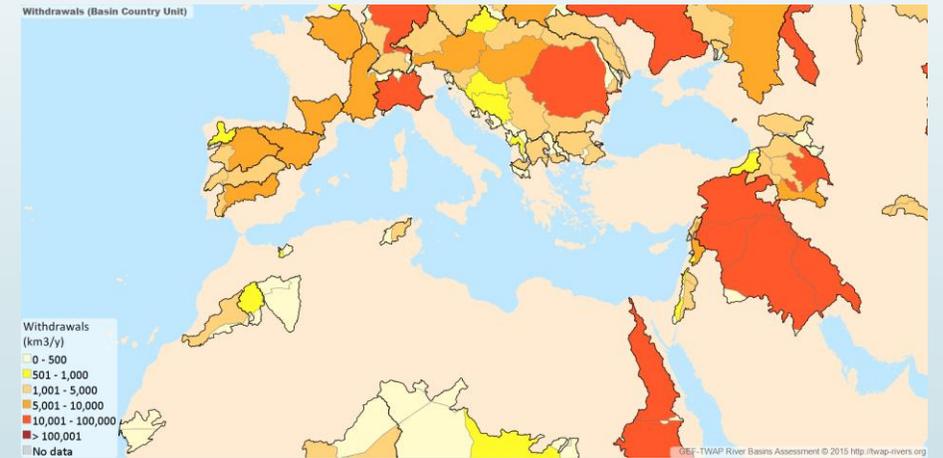


# Withdrawals

Basin scale

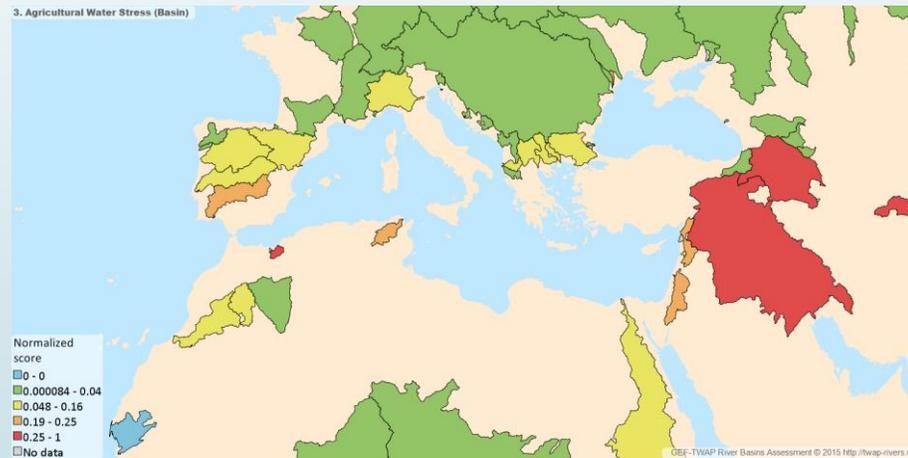


Basin Country Units (BCU)

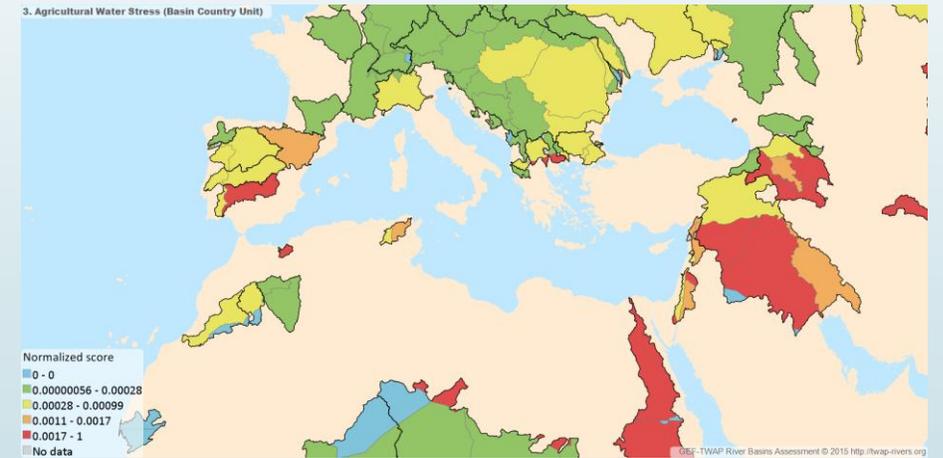


# Agricultural water stress

Basin scale

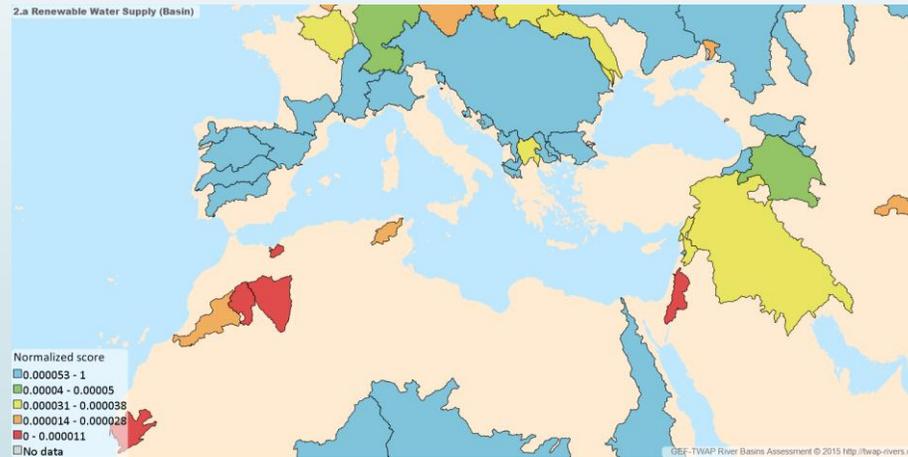


Basin Country Units (BCU)

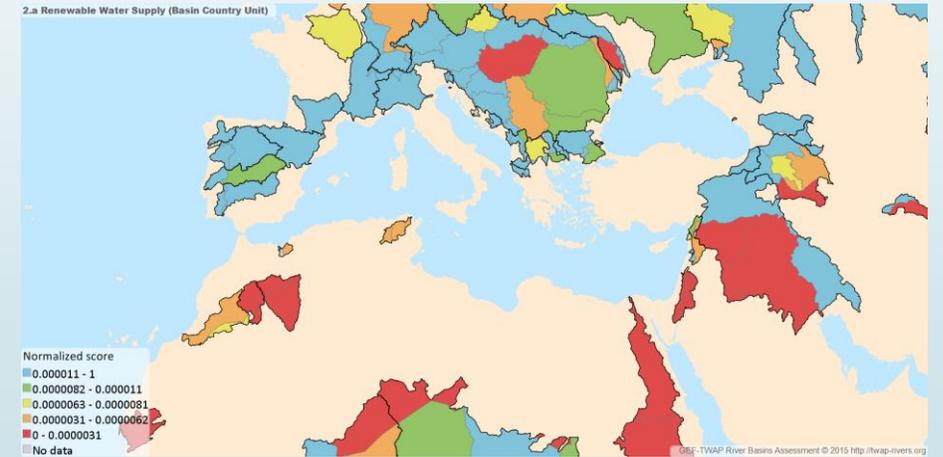


# Renewable water supply

Basin scale

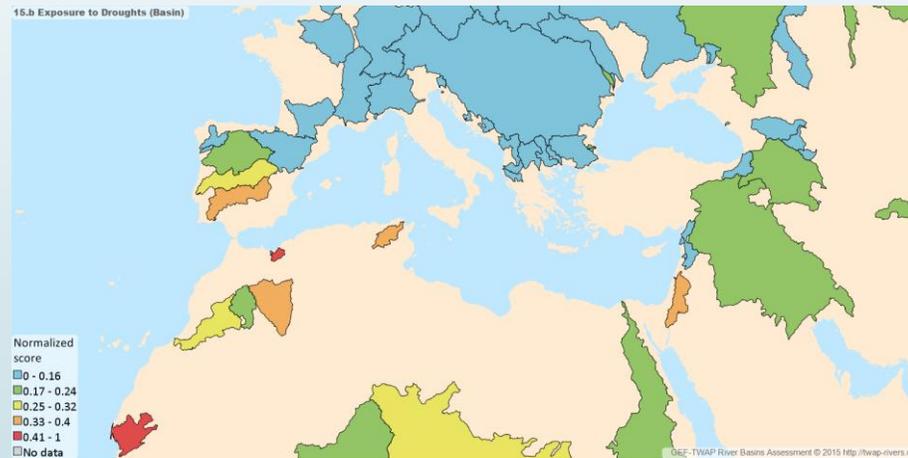


BCU

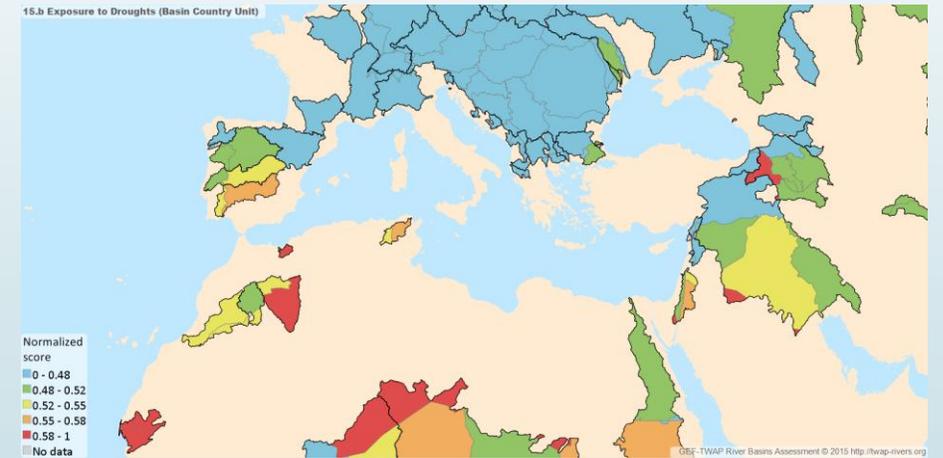


# Exposure to droughts

Basin scale

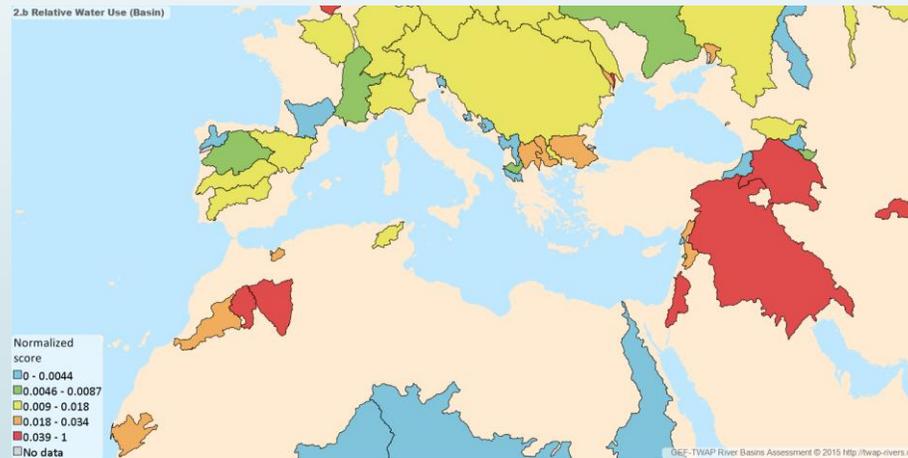


BCU

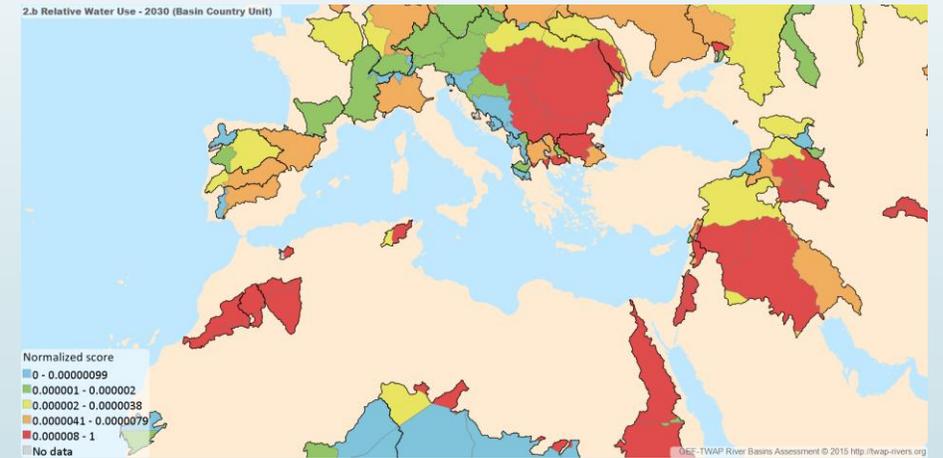


# Relative water use 2030

Basin scale

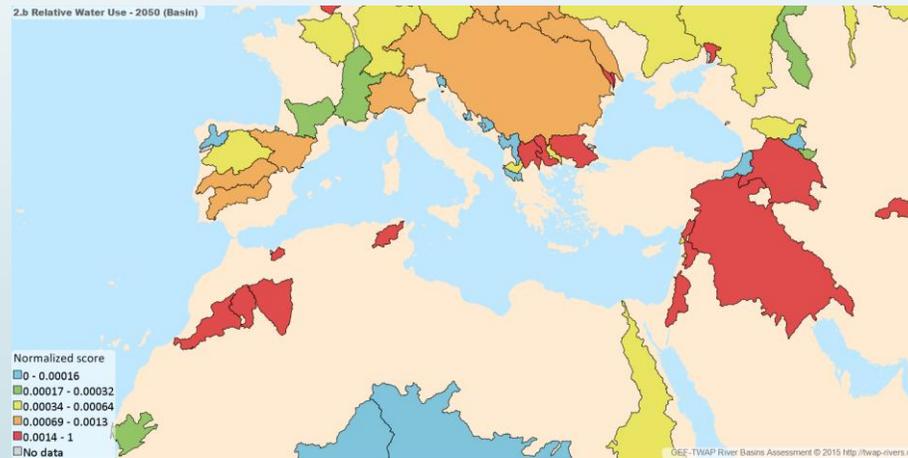


BCU

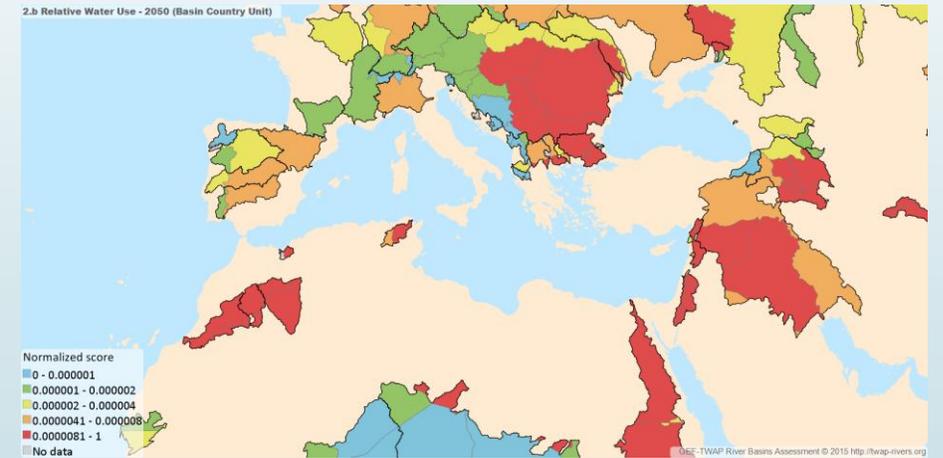


# Relative water use 2050

Basin scale



BCU



# Agricultural activity fraction





# CONCLUSION



- ▶ Analysing water and agriculture in Mediterranean TRB: lack of precise data
- ▶ Data at basin scale and Basin Country Unit need to be considered for the analysis
- ▶ National and local situations: specific features due to history, social and cultural aspects, water policy...
- ▶ Combination between Integrated Water Resource Management (IWRM) and diverse local and national realities
- ▶ Shared characteristics but also heterogeneity: Mare Nostrum with competing dynamics of union and separation

# Thank you!

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