

## Gender differences in water insecurity

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Universal and equitable access to safe water for all is central to achieving the 2030 Sustainable Development Goals (SDGs). Billions of people have gained access to basic water services since 2000, but around 600 million people still don't have adequate accesses to safe water. Moreover, impacts of water insecurity, that defined as the limited or uncertain availability of safe water, are different by gender. For example, water collections are often tasks for women especially in many parts of rural Africa, and they often spend more than 30 minutes per day for collecting water. Thus gender information are important to assess impacts of water insecurity on societies and livelihoods. However, there are often gaps between water resource assessments and gender researches. Most research that focus on gender differences in water access are conducted at local scales while most global water resource assessments don't include gender information. On the other hand, recent developments of population datasets enable us to use detail population distribution information that include gender and age in the world. Here we integrate these population datasets into water resource assessments to examine the gender differences in water insecurity around the globe. Our interdisciplinary approach between hydrology and demography would contribute to assess social impacts of water insecurity in the world.

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