Surface water for drinking with minor or no treatments - Demand

General description

The drinking water demand is displaying the abstractions from water resources for the public water supply. Water abstraction is understood as water removed from its source. We use collected data from Eurostat at regional scale, which is disaggregated to municipality level to map the drinking water demand.

Input Data

- Annual fresh water abstraction by source and by sector in million m³ per year
- National Census data
- Occupancy rates of tourist accommodation

Calculation processes

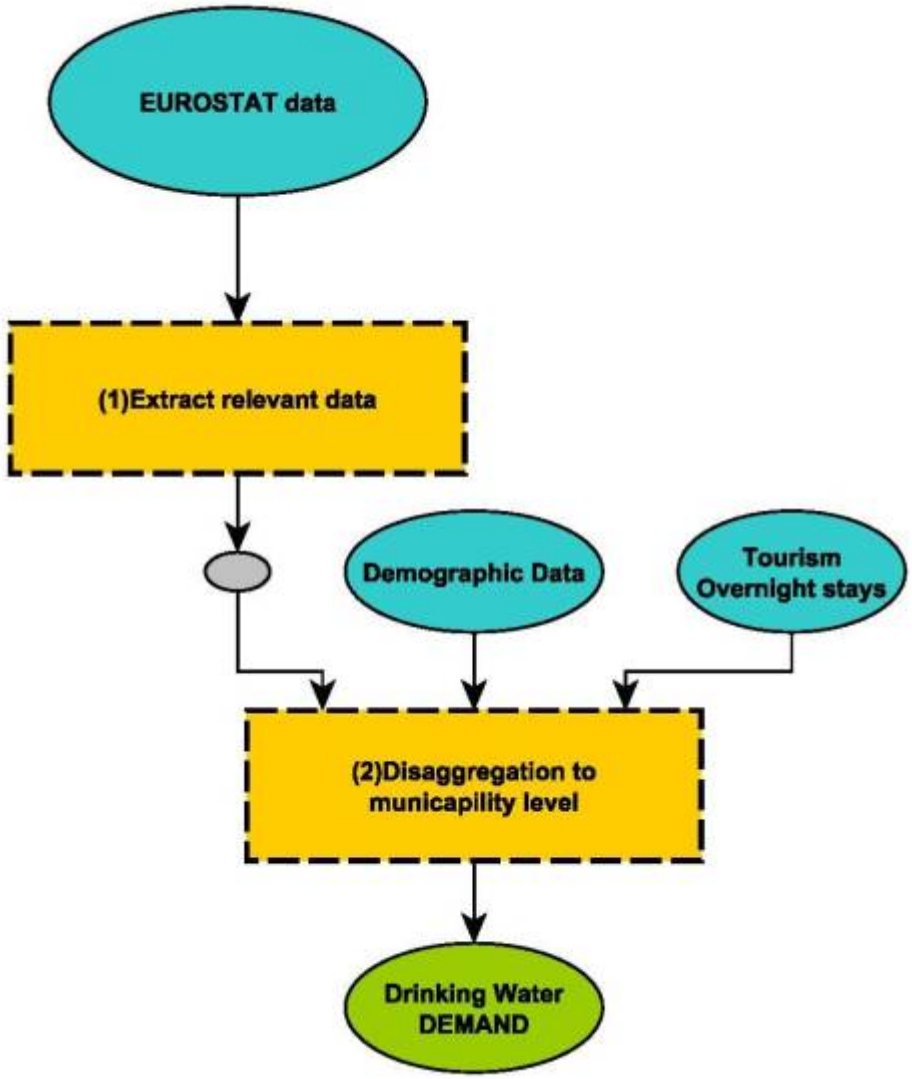
(1) Extract relevant data

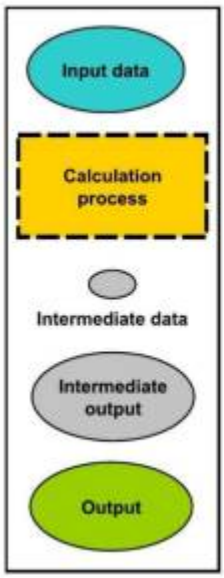
Similar to the flow indicator, we are here also working with EUROSTAT data which needs to be downloaded from the Homepage (water abstractions). In a next step, the necessary table needs to be filtered as we want to extract only the necessary information.

Thus after opening the table "**Water abstractions by NUT 2 regions**", it needs to be filtered for the country, the source and the water process. Here: Alpine Space Countries, fresh surface water and total gross abstraction.

(2) Disaggregation to municipality level

As the smallest scale here is the NUTS-2 level, we need to disaggregate the datasets again to municipal level. This is done by allocating the water abstraction according to the overnight stays in hotels and population data at municipal level.





Input data→elements that hold a value or a reference to data stored on disk. It is usually a spatial explicit information coming from official sources.

Calculation process→ the actual operation performed on the data. The number preceding the item refers to the number in the model description.

Intermediate data→ for each calculation process intermediate data is generated. This data, however, is usually not significant itself, but is used as an input for the next calculation step.

Intermediate output→ is intermediate data that has a significance for the ES evaluation.

Output→ is the result of the calculation process. It is typically one of the ES indicators, either Supply, Demand or Flow.