

## Current status of the groundwater use in an island of the Seto Inland Sea: a case study of Ikuchijima-island

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The study is aimed to examine the current status of the groundwater use in an island of the Seto Inland Sea, southern Japan. This area is characterized by high risk of drought with low annual rainfall and limited water resource. We conducted face-to-face surveys in the form of a multiple-choice questionnaire in two areas (districts of Miyabara and Hayashi) with different main resource of agricultural water in Ikuchijima-island, Onomichi-City. Citrus farms such as orange, lemon etc. are widely cultivated in both areas.

The rate of households having domestic well is about 74% in Miyabara district, and is about 62% in Hayashi district. The main purposes of groundwater use are watering in garden and car wash in both areas. About 20% of respondents answered that groundwater resource is not enough for the agricultural use in the dry season. It indicates the groundwater is regarded as one of the important water resource in the island. Averaged daily domestic use of groundwater per household are estimated to be 361L/day and 271L/day in Miyabara and Hayashi, respectively.

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