Droughts and Collective Decision-Making: Empirical Study on Common-Pool Resource Management in Japan

Kaori Tembata*

Graduate School of Economics, Kobe University Kenji Takeuchi[†] Graduate School of Economics, Kobe University

Abstract

This paper examines collective decision-making in water resource management during drought in Japan. Focusing on drought response actions implemented by river basin communities, we investigate the determinants of collective decisions on water withdrawal restrictions to manage water scarcity. Our main finding suggests that water user groups are more willing to cooperate in saving water when other water groups are cooperative as well. Moreover, we examine the impact of climate change on drought management. The finding shows that particular weather patterns lead to stricter water restrictions, suggesting that climate change may pose a threat to domestic water supply.

Keywords: Common-pool resource; Collective decision-making; Cooperation;

Drought response; Water conservation; Japan

JEL Classification: H41; Q25; Q54

^{*} Graduate School of Economics, Kobe University, Japan. E-mail: kaoritembata@gmail.com

[†] Graduate School of Economics, Kobe University, Japan. E-mail: takeuchi@econ.kobe-u.ac.jp