

**Social Capital as an Instrument for Common Pool Resource Management:  
A Case Study from an Irrigation Management in Sri Lanka†**

by

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**Abstract**

This paper investigates the effect of social capital between head-enders and tail-enders of irrigation canals on the water allocation problem between them. Although social capital is considered to be an instrument for common pool resource management, its effect among heterogeneous players do not reach to a consensus. As for irrigation management, water allocation problem between head-enders and tail-enders is one of these serious problems. Using unique natural and field experiment data as well as usual household survey, I find that social capital, especially trust, to their tail-enders has significantly positive effect on satisfaction with water usage. Considering the fact that the incentive structure of irrigation water allocation for head-enders closely resembles to that of dictator and trust games, this finding also supports the validity of experimentally measured social capital. In addition, I find that locational variation among members within each irrigation canal is important factor to form a risk sharing group. These findings indicate that social capital between head-end and tail-end also plays an important role in water allocation problem through the merit of social capital.

Keywords: Social capital; irrigation; field experiment; head-enders and tail-enders

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