



Tropentag, September 17-19, 2018, Ghent

“Global food security and food safety:
The role of universities”

Willingness to Pay for Irrigation Water Institutions' Improvements among Smallholder Farmers in Asal Kenya

DAVE IRERI, JACKSON LANGAT, MARGARET NGIGI

Egerton University, Agricultural Economics and Agribusiness, Kenya

Abstract

Access to production inputs is critical in the contributing to the food availability dimension of food security. One of the most important agricultural input is water. Accessing irrigation water especially in the arid and semi-arid lands (ASAL) is important for smallholder farmers in the effort to contribute to household food security. Irrigation water in the ASAL regions being common pool resources are well managed using the correct set of institutions (rules, norms and regulations). In the effort of improving irrigation water institutions, public participation should be sought to enhance acceptability and ownership of ideas and projects. This paper aimed at determining the willingness of smallholder farmers to pay for institutional improvement of irrigation water management in the ASAL regions of Kenya. Data was collected from a sample of 264 farmers using a dichotomous choice contingent valuation format questionnaire in Mbeere South, Kenya. Data were analysed using a double-bounded contingent valuation model. Results showed that smallholder farmers were willing to pay between KES 400 (USD 4) and KES 750 (USD 7.5) per cubic metre of irrigation water supplied under improved rules. The key institutional principles affecting smallholder farmers' willingness to pay included equity, enforcement and their ability to influence rules. These results suggest that improving institutions for managing irrigation water can improve accessibility of the resource. There should be enough public participation where the views of all stakeholders are taken into account when developing irrigation water policies as well as projects. Policies should also ensure equity is maintained and clear guidelines for enforcement of rules are set.

Keywords: Institutional improvement, institutions, irrigation water, Kenya, smallholder farmer, willingness to pay