## Contract Choice and Trust in Informal Groundwater Markets

Yashodha Yashodha

#### AKADEMISK AVHANDLING

som med vederbörligt tillstånd för vinnande av filosofie doktorsexamen vid Handelshögskolans fakultet, Göteborgs universitet, framlägges till offentlig granskning fredagen den 20 oktober, kl 10.15, i sal D32, Institutionen för nationalekonomi med statistik, Vasagatan 1

Göteborg 2017

#### **Bargaining and Contract Choice: Evidence from Informal Groundwater Contracts**

Informal market arrangements are often in place when formal institutions are too weak to establish a formal mechanism for resource allocation. In this paper, we study informal groundwater contracts in India, in particular, the bargaining power of sellers and buyers. We conduct an economic experiment with actual buyers and sellers of groundwater contracts, where agents make a series of choices between output-shared and fixed-price contracts, first individually and then jointly. Output-shared contracts are chosen more often when the decision is joint. Further, the likelihood of choosing an output-shared contract depends on the relative risk preferences of sellers and buyers. Sellers have a strong influence in deciding the joint contract. However, buyers' bargaining power increases when they share interpersonal relationships with sellers, such as kinship ties, or have a long contractual history together.

**JEL codes:** C83, C93, D86, Q13, Q25

**Keywords:** Output-shared contract, Fixed-price contract, Lab-in-field experiment, Random

parameter model

# Contract Choice and Risk Preferences: Evidence from Informal Groundwater Contract Choices in Rural India

Exploring the different contract systems in an agrarian market is important to understand their efficiency and equity aspects. This study analyses factors that can affect the choice of groundwater contracts in rural India. A primary survey and a lab-in-the-field experiment were carried out to obtain matched information about buyers and sellers of groundwater and to elicit their risk preferences. We find that the risk preferences of both sellers and buyers influence the choice of contract, which suggests a risk-sharing motive in the choice decision. A situation with a buyer who is more educated and older than the seller is associated with a lower probability that the contract is an output-shared contract, which implies the agents' relative influence on the contract decision. The results are particularly relevant for groundwater contracts where the endogenous matching of agents is less likely be an issue.

**JEL Codes:** C83, C93, D86, Q13, Q25

Keywords: Output-shared contract, Fixed-price contract, Endogenous matching, Omitted

variable bias

### Trust and Kinship: Experimental Evidence from Rural India

The empirical evidence on the role of kinship in trust and cooperation is mixed. In this study, we investigate the role of kinship when it comes to altruism and trust. We conduct a field experiment, using a dictator and trust game, in India with households involved in informal groundwater sharing. We find that a kin partner is trusted more than non-kin. Altruistic motives play a major role in explaining the differential trust towards kin and non-kin. We find only a small difference between trustworthiness of kin and non-kin receivers. However, we observed a change in the trustworthiness of kin receivers based on how close they are within their kin network. Interestingly, the expectation about non-kin trustworthiness is low, while in reality there is no difference in trustworthiness between kin and non-kin.

**JEL Codes:** C90, C93, D03, D64 **Keywords:** Trust, Altruism, Kinship

**ISBN:** 978-91-88199-25-6 (PRINTED) 978-91-88199-26-3(PDF)

**Contact information:** Yashodha Yashodha, Department of Economics, School of Business, Economics and Law, University of Gothenburg, P.O. Box 640, SE 405 30, Gothenburg, Sweden. E-

mail: yashodha.yashodha@economics.gu.se