



Water markets in an urban world: lessons from rural-to-urban reallocation

Dustin Garrick (1), Erin O'Donnell (2), Nicholas Brozovic (3), Lucia De Stefano (4), and Laura Turley (1)

(1) University of Oxford, Smith School of Enterprise and the Environment, United Kingdom (dustin.garrick@ouce.ox.ac.uk), (2) University of Melbourne Law School, (3) Robert B. Daugherty Water for Food Global Institute at the University of Nebraska, (4) Complutense University of Madrid

Cities and urban areas are projected to grow by over 2.5 billion people by 2050 with 90% of this increase expected in Africa and Asia. Rural regions are often seen as key sources of urban water supply, creating pressure for reallocation from irrigated agriculture to cities. Despite large differences in the marginal productivity of water in agricultural and urban uses, market-based water trading from farms to cities has long been more limited than predicted by economic theory. This presentation investigates why, reviews emerging evidence from formal and informal markets, and explores the implications of rapid urbanisation for water markets of the future. Rapid urbanization, coupled with technological innovations and changing behavior, are poised to transform the economics of water markets and reallocation, calling for new frameworks and metrics to design, test and evaluate market-based responses to competition between cities and agriculture for water. Lessons from the leading edge – spanning from Colorado to China and Chennai – illustrate the challenges and opportunities for advancing such solutions. This paper presents preliminary findings from a two-part study of market-based reallocation from rural-to-urban regions. The first part of the study synthesizes evidence from global experiences covered in the academic and policy literature based on a systematic review of the drivers, structure and performance of market-based reallocation from rural to urban water uses. The second part of the study employs case studies to assess the evolution and effectiveness of these markets across multiple criteria and from a systems perspective. The preliminary findings suggest that the success of market-based reallocation projects depends on their integration into broader governance frameworks and robust water accounting.