

Preface

On a blue planet, a book about water ‘scarcity’ sounds like pursuing an oxymoron. Scarcity is usually a description of the gap between expectations and reality at a given point in time. The former are subjective and the latter is influenced by technology, and institutions (incentive structures). Water scarcity is a resource management issue at the interface between natural environment and social institutions. There are divergent viewpoints as to the causes of water scarcity and how best to deal with it: ranging from arguments that suggest population to be the main problem to those that suggest elaborate engineering projects as solutions (for example, to transfer water from one river basin to another). In this book, I would like to argue that scarcity is seldom a result of lack of water resources but is often found where the necessary institutions are weak or missing. In such an environment, scarcity is constructed and used as a hostage to influence policy agenda and investment priorities. Scarcity exacerbates inequality in access to water, itself a manifestation of wider economic inequality. Therefore, to develop policy interventions to tackle scarcity, it is necessary to understand what institutions exist and how these shape and influence water access and allocation mechanisms, and how accountable such institutions are to different groups of stakeholders. At the level of individual citizens and households, there is a need to examine what role entitlements and property rights can play in enabling them to cope with scarcity in the short run and in redressing the causes of scarcity and inequality in the long run. This book is an attempt to examine these issues.

The seeds of this research were sown during a prolonged dry period many years ago, while I was researching on environmental management issues in Chennai, India. During this period, water scarcity was much in public deliberations in Chennai even as water was being transported most visibly by large tanker-trucks, small carts and improvised water carriers on bicycles. Almost at any time of the day and almost in any street, one could see long queues of empty water containers placed several hours before street corner tanks were due to be filled by one of the tanker-trucks. Such queues seemed to symbolise in a surreal manner both despair and also hope. It seemed ironic that in a city suffering from water scarcity, malaria became rampant. As water trade boomed and every family stored as much water as they could get, mosquitoes did not have difficulty breeding. Past

tense is perhaps unnecessary as similar vignettes of scarcity manifest themselves in many cities, towns, and villages across arid regions in Asia and Africa.

The research that underpins this book started as an enquiry to understand the causes and consequences of water scarcity at micro-level, for example, based on household surveys, focus groups, and other research methods. However, pretty soon it was clear that there was a need to simultaneously examine corresponding systemic and macro-level factors. For example, does the extent and pattern of water use vary with economic development and structural change? What implications does this have on mechanisms and institutions for sharing water resources? Are there sources of local-level conflict between different uses or different 'right holders' during this structural change process? What mechanisms can be developed to share water peacefully by anticipating and preempting such conflict-potential? How to develop institutions to address and mitigate inequality in access to water? These are some of the questions that have motivated the research reported here.

This book has evolved over a long period of time and it would never have reached this stage without the help and cooperation I received from many different people.

At the outset, I wish to thank series editors Professors Wallace Oates and Henk Folmer for various comments on the proposal and their encouragement.

Some of the early work on micro-level data of Chennai was undertaken in 2001 during my short sabbatical at the United Nations University's World Institute for Development Economics Research (UNU-WIDER) at Helsinki. I am grateful to UNU-WIDER for giving me the opportunity and to Tony Addison, Mark McGillivray, Tony Shorrocks, Matthew Odedokun, George Mavrotas, Adam Swallow, Janis Vehmaan-Kreula and Tiina Iduoji for making me feel at home at WIDER during my sabbatical and during other visits since. Special thanks to Tony Addison for encouraging me to examine post-conflict contexts and to Mark McGillivray for encouraging me to work on Millennium Development Goals.

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All the usual disclaimers apply and I alone remain responsible for what is presented here.

PBA
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To Kethaki, Nuthana, and Kalyani

