



Towards **WATER** Wisdom

Limits, Justice, Harmony

Ramaswamy R. Iyer



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Limits, Justice, Harmony

Ramaswamy R. Iyer



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Towards Water Wisdom

Select Reviews of *WATER: Perspectives, Issues, Concerns*

by Ramaswamy R. Iyer

"This is a work of encyclopaedic scope...the volume is a veritable storehouse of knowledge for scholars interested in the political economy of water resource management in South Asia."

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"The importance of the book is in bringing into a logical framework the various perceptions and dimensions of the problems of water within India and its relationship with neighbouring countries..."

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Limits, Justice, Harmony

Ramaswamy R. Iyer



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Singapore | Washington DC | Melbourne

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The SAGE Team: Sugata Ghosh, Janaki Srinivasan, Sanjeev Kumar Sharma

To
the memory of the late Prof. K.J. Shah of Dharwar,
friend, philosopher, mentor,
who continues to be badly missed twelve years after he left us.

In 1949 he brought Wittgenstein into my ken and forever changed my thinking; some years later he unsettled my thinking again by forcing me to grapple with Gandhi; and still later, he began to educate me on Bhartrhari and Bharata, but alas, left that process sadly incomplete.

I should like to think that he would have approved of this book.

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Preface

The present book began as a sequel or a companion volume to my earlier book (*WATER: Perspectives, Issues, Concerns*, 2003), updating some old topics and covering some new ground not traversed earlier. However, in the course of writing it became a different kind of book. While the first book was planned as a compendious handbook on water for the general reader and covered a wide range of themes and issues extensively, the present one is slimmer and less extensive in coverage, and more focussed on its central concern. It is essentially 'argumentative', to use a term now given currency by Amartya Sen, but not (I hope) at the cost of precision or reasonableness. It preaches change.

Its plea is encapsulated in the three terms of the title: *Limits, Justice, Harmony*. Each of these has multiple meanings and all three are interrelated. 'Limits' on water-use are necessary for ensuring equitable sharing ('justice') and for avoiding conflicts with others and with nature ('harmony'), 'justice' means justice to other users of the resource, to those whose lives and livelihoods are likely to be disrupted by our plans, to other forms of life, and to future generations (that harks back to 'limits' and forward to 'harmony'); and 'harmony' means harmony with fellow human beings within and beyond political borders and with nature (that refers us back to 'limits' and 'justice'). Everything is connected with everything else; and the water crisis is merely a part of a larger crisis of 'development'. But I must restrain myself and not begin the argument at the threshold.

The aim of this book is not to offer new knowledge or research findings but to place before the reader the results of some hard and sustained thinking. It is for the reader to judge the usefulness of that effort.

The structure of the book seems clear enough from the Contents page, and it seems unnecessary to outline it here. The book must speak for itself.

An effort has been made to refrain from going over ground already covered in the first book, but repetition has occasionally (and minimally) been necessitated by considerations of self-contained intelligibility and completeness. In a few instances, this book looks at an already discussed issue from a slightly different perspective or sets forth the results of further thinking. (The minimisation of repetition between the two books as well as between sections of this book has necessitated recourse to the device of cross-referencing.)

Finally, the book does not presume to offer wisdom but makes a plea for it.

Ramaswamy R. Iyer

June–August 2006

New Delhi

Acknowledgements

Permissions for drawing upon material that has been published or is under publication, received from various sources, are gratefully acknowledged. A list of those writings is given in Appendix I. (However, the extent of use varies from the negligible or minimal to the significant; this is not a compilation of earlier writings.)

The writing of this book was a personal effort carried on at home, without benefit of academic associates, research or secretarial assistance or office facilities. The book may show traces of those limitations. However, the intellectual debt that I owe to a large number of friends and colleagues in government, Centre for Policy Research (CPR), academia, and among NGOs, activists, the media, organisers of and fellow-participants in seminars and conferences, others working on water, those who made me think about certain issues by asking me to write or speak, those who challenged my conscience and made me half an activist, and so on, is enormous. It is hereby duly acknowledged, though the names are too numerous to list.

I must thank Suhasini Ramaswamy (my wife) and Rajeswari Raina (my colleague in CPR) for going through the full manuscript and giving me some very useful comments.

May I also express my appreciation of the strong support that I have received from all those concerned with this book at Sage Publications, and, in particular, Sugata Ghosh and Neha Kohli.

Preamble: Understanding Water

This book will begin with a statement that ought to be obvious and unnecessary, but alas, is not: water, a simple and familiar feature of our daily life, is in fact a highly complex phenomenon with multiple aspects.

Water occurs in many forms: precipitation (snow, sleet and rain), snowmelt, glaciers, rivers, streams, lakes, ponds and other surface water bodies, groundwater aquifers (shallow and deep; active, trapped and fossil), springs, wetlands, soil moisture and atmospheric moisture (leaving aside the oceans). That all these are manifestations of water is not common knowledge, though it may seem self-evident when pointed out. Even less common is the knowledge of the concepts of *hydrosphere*,¹ *hydrological cycle*,² *hydrological unity*³ and the *finite*⁴ nature

¹ All water on earth.

² Precipitation → water retained in the atmosphere or the soil; surface runoff; seepage or percolation underground → evaporation from land (including transpiration by plants) and from sea → precipitation.

³ The source of all freshwater on earth is precipitation (rainfall and snowfall); water may take the form of ice on mountains and in glaciers, atmospheric or soil moisture, groundwater, surface water bodies, rivers and streams, wetlands, and so on, but it is all water and constitutes a unity.

⁴ Given the hydrological cycle, the quantum of water on earth remains the same for millennia and does not change. We cannot create new water, nor can we destroy water: all consumed or used water reappears in another (though not always usable) form, and whatever evaporates comes down later as rain or snow.