

## BOOK REVIEWS

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undertaken and will go a long way in solving chronic shortage of water in cities. Chennai has set an example in this respect by amending building laws to make it obligatory for all new constructions in the city to have rainfall harvesting structures to store water. Such stored water could be used for flushing toilets, washing and gardening.

Chapter 5 outlines technology available for water harvesting such as remote sensing and geographic information system, groundwater recharge designs, computer databases and waste-water recycling. Significant advances in these fields are possible provided the scientific community applies its mind to effect improvements in traditional technology.

The need to make water everybody's business is emphasized in a group of papers assembled in Chapter 6. Reasons for decline in traditional technologies are analysed. Official preoccupation with mega projects implemented with borrowed money and neglect of tanks has

resulted in too much centralization and the consequent neglect of traditional technologies based on self-reliance. Another glaring factor is the lack of interest shown by research institutes in tackling problems of the poor in rural areas.

CSE and particularly its leader Anil Agarwal are to be congratulated for having rendered great service by forewarning the people of the bad days looming ahead – the spectre of water famine – threatening to overtake them and suggesting measures for combating the menace.

The attractive part of this educative book under review are the numerous photographs in colour and the large number of line drawings specially drawn to convey its message to everyone. Scientists in our research institutes must take note of this publication and help in organizing sanctuaries within their campus, where models can be created and the effectiveness of the technologies aimed at rainwater harvesting and pollution control are demonstrated.

State water is heavily subsidized and thus under-priced leading to adoption of wasteful practices and squandering of a precious resource. We have more wealth in water than Arabia in oil. This resource therefore, has to be conserved and used with great care if future crises are to be avoided. Our scientists should develop technologies aimed at converting our water resources into real wealth through efficient conservation and use and thus build a future based on the enduring past of India. The book under review is a step in that direction and deserves to be closely studied by our administrators, scientists, the intelligent public and all those concerned with public welfare.

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## PERSONAL NEWS

### A link with the past: Divya Darshan Pant (1919–2001)

On 9 May 2001, India lost an eminent botanist, an excellent teacher, a distinguished visionary, researcher and a fearless critic in the demise of Divya Darshan Pant. Pant was the founder of a strong school of research in palaeobotany and morphology of plants in the Department of Botany, Allahabad University. Beginning his career as a lecturer in 1945, he became Professor and Head of the Department of Botany in 1966. When he was at the helm of affairs from 1966 to 1981, the department achieved international fame for both teaching and research.

Divya Darshan Pant was born on 18 October 1919 in the pine-dotted picturesque surrounding of Ranikhet in Kumaon Himalaya. His father Ambika Dutt Pant was a highly respected Ayurvedic physician and Editor and Publisher of a magazine, *Himalaya*. After his early school education in Ranikhet and Nainital, he moved to Lucknow where he graduated and later received his post graduation and

research training under Birbal Sahni. In 1946, he married Radha Pant, a biochemist who later headed the Department of Biochemistry and Home Science in Allahabad University.

The blending of interest in living and fossil plants and combination of facts with interpretative ideas were Pant's main distinctions. His work enables us to peep into the plant world of Gondwana and Pre-Gondwana times through the modern window. On the basis of his important research contributions on the reconstruction of plants of glossopterids, diversity of the floristic elements and reproductive biology, he was recognized as an authority on *Glossopteris* flora. His interpretation of the compressed organs of *Glossopteris* and related genera, including their vegetative parts and fructifications have been vividly confirmed by the subsequent findings of permineralized fossils. He was the first to propose the existence of mycorrhizic gametophytes in

Rhynie Chert by his interpretation of gametophytic and mycorrhizic nature of *Rhynia gwynnevaughanii* and strongly advocated it against criticisms throughout his life. However, this work induced others to discover various gametophytes in Rhynie Chert like *Lyonophyton* and *Sciadophyton*.

On the basis of his work Pant established that the members of the *Glossopteris* flora had very diverse woods, megaspores, fructifications and seeds. His work on Gondwana conifers, particularly *Buriadia heterophylla* suggested that these could either be regarded as coneless prepinophytes or may be altogether assigned to new group of plants. His work also shed light on Lower Gondwana structurally preserved pteridophytes. Apart from the peninsular part of India, he had extended his studies on extrapeninsular Lower Gondwana and Pre-Gondwana (Lower Carboniferous) flora of Punjab–Kashmir Himalayas, where he found an admixture of Cathaysian and

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