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Irrigation is the science of providing water to the lands in accordance with the requirements of the crops grown therein. It has been found to increase the productivity of rain-fed lands by as much as five times in a tropical country like India.

The annual fresh water supply (runoff) in India is 1869 b.cum. However, the present utilisation (1997) is only 605 b.cum for all its uses. Out of this, about 500 b.cum, *i.e.* about 83%, is being used for irrigation alone. Even with such a huge percentage of utilisation of water for irrigation, we are just able to irrigate only about 40% of our gross cropped area.

Additional waters are, thus, required to be developed for bringing additional cropped area under irrigation, to increase our food and fibre production. The techniques which are employed for development and management of water resources become vitally important in this context, and have been lucidly explained in this popular book.

The prestigious UPSC competitions continue to carry questions from this book year after year.

The present edition has further been revised and updated with rewriting of certain articles and with addition of certain new topics and numerical examples. The question bank containing questions of Engineering Services and Civil Services Exams. has also been updated.

AUTHOR'S PROFILE

The author, Mr. Santosh Kumar Garg, is a veteran in the field of civil engineering and has authored eight widely acclaimed books. His books on **Environmental Engineering Vol. I & II** as well as on **Irrigation Engineering and Hydraulic Structures** are being followed in almost all the engineering colleges in India for the last more than 18-20 years. His three new publications titled **Geotech Engineering, International and Interstate River Water Disputes,** and **Physical and Engineering Geology** have also gained a lot of popularity within a short span of their publications.