

# **Management Options in Artificial Recharge of Ground Water in India**

**CHADHA Dr. D. K. & SHARMA Dr. S. K. Central Ground Water Board, Ministry of Water Resources, Government of India, Jamnagar House, Mansingh Road, New Delhi-110 011 (India)**

Artificial recharge of aquifer systems to combat situation of mining of ground water caused by over-exploitation and to prevent ground water pollution are increasingly becoming important ground water management practices in improving water supplies in India. Recharge of ground water utilising storm water offers great scope and potential in the replenishment of urban aquifers. Surplus monsoon run-off in river and stream have scope in recharging ground water aquifers locally.

The ground water development in India is at a cross-roads. Development of ground water resource in isolation has no more remained a planning option. Unprecedented ground water development in last two decades has though contributed in enhancing food production through ground water based irrigation, but has also adversely effected the availability of ground water in many parts of the country. Sustainability of ground water – a key aspect of our planning has been endangered due to indiscriminate ground water development in such areas. Augmentation of ground water resources has, therefore, become not only an integral part of ground water development strategy but an inescapable necessity.

The paper describes success stories of artificial recharge of ground water for arid regions, coastal areas, hard rock areas and ground water overexploited areas in India using various direct and indirect method of recharging ground water.