WATER-HARVESTING SCIENCE

Past forward, please!



Pankaj Jaiswal pjaiswal@hindustantimes.com

JHANSI/MAHOBA: All the surviving and still functional ancientmedieval water-harvesting structures in Bundelkhand region simply suggest the concept's relevance even today.

The Mahoba municipality supplies drinking water to the town people from the millennium old Madansagar. All the inter-connected ponds of Charkhari town in Mahoba district are the lifeline of the town.

Supa's Bawri, a thousand year after, in the same district never goes dry. And one can see women drawing water from various Chandela and Bundela era wells even now.

Experts say applying the timetested concepts that Chandela and Bundela rulers had applied could solve the region's water problems. They say the government should have a separate Bundelkhand watershed development department for harvesting rainwater and a Bundelkhand tank division for managing the harvested water in tanks, ponds, dams and wells.

Dr Ramdutt Tripathi 'Ajaye', a historian who wrote many a book on Mahoba and Bundelkhand history, says: "It is an irony that all the water man-



JOY OF WATER-HARVESTING: Here is a new checkdam built in Ganeshgarh village in Jhansi, which is a miniature of Chandela-Bundela period dams.

agement is under UP irrigation department which does not have region specific expertise to deal with water issues of the region. The British government had a region-specific department. They had a Tank Division which dealt with water in ponds, wells and dams. But the division was abolished and merged into the Irrigation department postindependence. There is a need to create a tank department to deal with management and maintenance of the surface reser-

Chandel and Bundela rulers had made provisions for maintenance—like cleaning, de-silt-

British made the tank division to do the same, but now all the reservoirs have heavy silt.

So much so that the bed-level of the reservoirs has gone up by several meters. And due to this volume of the reservoirs has decreased substantially. Result: The reservoirs that had so much water to last five successive droughts are completely dry by October.

"Unlike some desert regions, Bundelkhand is not totally dry. It does get rain every year and if this rain water is collected well then the region would not suffer the way it has been for

ing, and repair of the reservoirs. past several years. The planners now need to go back to history and apply the concepts for the water security in the future," says VK Joshi, former director, Geological Survey of India (GSI), North, Lucknow. And some communities in the region have proved it that applying the past in the present may make the future secure. Like in the Ganeshgarh village in Jhansi or Mignee in Madhogarh in Jalaun.

In Mignee, the village community collected money and built two check-dams on the ancient water-shed management concept. Just two checkdams flipped the story of the

The government should follow the science that the olden concept followed which emphasized the most on site selection.

> RAM CHANDER Professor, Jhansi University

The reservoirs that the check dams created recharged the ground water so much so that handpumps even at the higher levels produce water, all the wells have water, and granaries in the villages are full while the nearby villages suffer drought.

In Ganeshgarh, a rural development institution, NABARD aided funds for building 22 checkdams and associated structures on the rain rivulets in the village. It was a barren high-altitude village before the checkdams were built. Now it is such a self-sufficient village that there is no migration and none opt to work for rural employment

Prof Ram Chander, head of the department of geology, Jhansi University says: "The government should also do similar and large scale things. And they should follow the science that the olden concept followed which emphasized the most on site selection. Half the work is done if one selects a geologically right spot for ponds, wells, checkdams or dams.

(SERIES CONCLUDES)