SCIENTIFIC CORRESPONDENCE

11 m<sup>3</sup>/hr which varies significantly from estimated through Meinzer's that approximation<sup>8</sup>. Thus, one combination well can recharge ~250 m<sup>3</sup>/day. Considering 60 days/year as suitable for recharge, one combination well can recharge 0.015 million m<sup>3</sup>/year. As the average annual depletion in aquifer storage in the past 30 years is 0.479 million m<sup>3</sup>/year, about 32 combination wells are required to arrest the annual storage depletion in future from the present level. The minimum depth of the combination well in the area identified for recharge is shown in Figure 4. The combination wells are more suitable along the banks of the River Ganges, as they will also derive the benefit of bank storage that builds up during the high river stage of the River Ganges in the monsoon season. The only caution that needs to be exercised in adopting this technique for recharge is to have stringent groundwater quality-monitoring mechanism around the combination well site to ensure that by no means the water quality of the deeper aquifer system gets impaired. Combination wells should not be located in those parts of the urban area where the groundwater quality of the shallow aquifer is not suitable for drinking as well as

in areas where open channel carries sewage and waste water as in such areas faecal tests have been found positive in samples from dugwells<sup>9</sup>.

- 1. Census data, Census of India 2011, Government of India.
- Saha, D., Dwivedi, S. N. and Singh, R. K., Environ. Earth Sci., 2014, 71, 1721–1735.
- Dwivedi, S. N., Singh, R. K. and Saha, D., Patna urban, Bihar in ground water scenario in major cities of India, CGWB, MoWR, Govt of India, 2011, pp. 157–163.
- Bose, P. K., Saikia, B. C. and Mukherjee, B. B., Refraction seismic survey for ground water in Patna and Gaya districts Bihar, unpublished report, GSI, Calcutta, 1966.
- National Physical Research Laboratory, Ahmedabad, Artificial recharge experiments for underground storage of water based on Siphon principle, 1977, p. 62.
- Karanth, K. R., Ground Water Assessment, Development and Management, Tata McGraw Hill, New Delhi, 1987, p. 564.
- Meinzer, O. E., Outline of ground-water hydrology with definitions, USGS Water Supply Paper 494, 1923, p. 71.
- Dwivedi, S. N., Shukla, R. R., Singh, R., Adhikari, S. K., Nambi, K. A., Purty, S. S. and Roy, G. K., *Curr. Sci.*, 2015 (under review).

 Maitra, M. K. and Ghose, N. C., Ground Water Management – An Application, Ashish Publishing House, New Delhi, 1992, p. 305.

ACKNOWLEDGEMENTS. We thank Chairman and Members of Central Ground Water Board for their kind support and inspiration. We also thank Dr P. C. Chandra, Dr Dipankar Saha, former Regional Directors of CGWB, Patna and A. K. Agrawal, K. K. Singh, T. B. N. Singh, R. R. Shukla, S. Sahu, S. Upadhyay, S. S. Ganguly and S. K. Singh for their support.

Received 22 December 2014; accepted 19 January 2015

S. N. DWIVEDI<sup>1,\*</sup> RAJ K. SINGH<sup>2</sup>

<sup>1</sup>Central Ground Water Board, Mid-Eastern Region, Patna 800 001, India <sup>2</sup>School of Earth, Ocean and Climate Sciences, Indian Institute of Technology Bhubaneswar, Bhubaneswar 751 013, India \*For correspondence. e-mail: snathdwivedi@gmail.com

## Erratum

## Human-wildlife conflict or co-existence: what do we want?

## Palatty Allesh Sinu and M. Nagarajan

[Curr. Sci., 2015, 108, 1036–1038]

The sentence 'Biologists suggest that selective culling of both males and females based on the demography status may be allowed to reduce this problem.'

## should be replaced by

'Biologists strongly opposed the selective culling of both males and females by the farmers in retaliation to macaque crop-raiding.'

This error has been corrected in the online version.