

Interactive comment on “Rapid evaluation of water supply project feasibility in Kolkata, India” by K. Dutta Roy et al.

Anonymous Referee #2

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The paper deals with a number of different topics. It reports some interesting field data from Kolkata, it contains good discussions of the literature where they are relevant, it uses neural networks to estimate costs for new expansions and Monte Carlo simulation for to deal with uncertain modeling parameters, and uses contingent evaluation for estimating the willingness to pay for better service. While this is an impressive array of tools used for this case study, the multiple foci of the paper is also its greatest weakness. At the end of the paper the reader gets an impression of a job well done, but without clearly seeing which parts are the novel and innovative which deserves publication in a research journal. I suggest that the authors retain the main elements of the paper, but emphasize those aspects that are unusual.

The neural network approach is claimed to be faster than conventional engineering cost

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estimates. Given the effort to compile all the historical costs, to set up a neural network, to train it and to find its optimal configuration seems to require a much larger investment in time and effort. It is puzzling to find that the power drawn by the pump station did not enter in the cost estimates – this is usually the case in almost all the studies this reviewer is aware of. Claims about the superiority of the the neural networks have to be substantiated.

The is some good introduction of the inherent difficulties of conducting willingness-to-pay studies, but the comparison of results (Table 5) shows that there is poor convergence of their results. Could the authors add some comments of why they still consider this an appropriate method, or what the alternative could have been?

Interactive comment on Drink. Water Eng. Sci. Discuss., 3, 65, 2010.

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