Reviewer's report

Title: Failures in the quality, quantity, and reliability of water provided through an informal distribution system in a slum in Mumbai, India

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Reviewer: Robert Gilman

Reviewer's report:

To the authors – this paper is well written and mirrors other papers that demonstrate the economic inequality present in water cost and quality present in non municipal or government water supplies to communities. Specific questions that are not answered are

If 14% of the adults only defecate in open air – where do the other 86% go. If water hoses go thru the ocean how then is water not saline if there are holes in the hoses. It is not at all clear what water is used for drinking. Is this water boiled is there a cost to this. If stored differently from other water how is this in storage containers that permit hands to get in or not. How was income obtained- is this just by asking -notoriously misleading. How was total water estimated and how was usage determined. What was the ratio of male to female respondents - especially in regard to missed interviews. If mainly female was the females account of income really accurate since often they do not know the income of their husbands. The amounts of INR should be put in terms of either dollars or euros -

Drinking water should be separated from non drinking water and how it is stored and in what type of containers detailed – ie open to hands or does not permit hands to enter. How was drinking water used – raw , in teas or after boiling. If boiled what was the fuel consumed and was that cost also considered.

I am not at all sure that intermittent chlorination will function and suggest that the only way to get pure water to this community would be thru government supply which appears to function well in other govt approved communities. There usually is a water mafia in these distribution schemes that controls access and this will not disappear unless government installations occur. Who controls and pays for the pumps – and how the distribution system of payments for the water is not detailed here and may not only be difficult to obtain but somewhat dangerous – this should however be mentioned in the article.

These costs reflect the high cost of water obtained under informal circumstances and does not take into account the high cost of disease that occurs due to lack of potable, high quantity water and sewage available with in house connection. I think this article with somewhat better costing and more specific costing has the potential to make an important point to governments.

Statistical review: No, the manuscript does not need to be seen by a
statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests’