Reviewer's report

Title: Using Data Envelopment Analysis to Measure the extent of Technical Efficiency of Public Health Centres in Ghana

Version: 1 Date: 31 July 2008

Reviewer: Ali Ermouznejad

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Major Compulsory Revisions
Page 10, The discussion on the scale efficiency, CRS and VRS is not sufficient. This is also conflict with discussion on page 11, where the author said that "Table 2 also presents the technical efficiency scores and the scale efficiency levels of the 89 health centres (HC). " I could not see the scale efficiency in Table 2, I suggest the authors include the VRA and scale efficiency in the manuscript. Health centres usually operate under VRS.

Minor Essential Revisions
Page 10, The discussion on the scale efficiency, CRS and VRS is not sufficient. This is also conflict with discussion on page 11, where the author said that "Table 2 also presents the technical efficiency scores and the scale efficiency levels of the 89 health centres (HC). " I could not see the scale efficiency in Table 2, I suggest the authors include the VRA and scale efficiency in the manuscript. Health centres usually operate under VRS.

Page 6: Some discussion should be included to ensure correct selection if input-output variables, evidence can be given from literature.

Page 9. Model 1, First constraint in model should be corrected
a) delete “Max h0=” from the left hand side, b) change j0 to j
Second constrain should include Vi=>0
Page 9, first sentence after Model 1, please change j0 to j, second sentence, change ((ur, vr) to (ur, vi)

Page 9, Model 2,
In the objective function change j to j0
In the first constraints change j to j0 and make it equal to “=1”
In the second and third constraint use the similar index for Sigma as used in Model 1

Page 11: first paragraph, in Table 2 the result presented as score to maximum 1, the discussion in the paper refer to inefficiency as percentage, I suggest to present the results in Table 2 as percentage.
Page 11, last paragraph, what is CHPS stand for?

Page 12: What is ANC stand for? What is MDG stand for?

Table 1: First row: “3,5” should be “3.5”

Some new references can be included as follows:


Discretionary Revisions

Page 12, Discussion could be expanded with some results obtained from DEA analysis, e.g.
- Table of Output (input) increases (reductions) needed to make individual inefficient health centres efficient
- Peer analysis

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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