Interactive comment on “Bayesian networks modelling in support to cross cutting analysis of water supply and sanitation in developing countries” by C. Dondeynaz et al.

Anonymous Referee #2

Received and published: 10 May 2013

GENERAL COMMENTS

Authors show a very complex model aimed to tackle a cross cutting analysis of water supply and sanitation in developing countries.

The state of the art is poor and not enough to meet the standards of a scientific paper. There are numerous missing key references of applications and studies on Bayesian Networks modelling for water resources studies. (Castelletti and Soncini-Sessa; Susnik et al., Carmona et al., Molina et al.,)...among others.

There are also missing key references and concepts for this topic. i.e: Authors have
no mentioned the well known and most famous indicator for water accessibility "Water Poverty Index" developed for developing countries.

English grammar is poor and the text should be entirely revised by an English native person.

Statistics are not justified in the entire modelling process. There are too many tables on some statistics but they are not well explained through the manuscript. Why do the authors choose these statistics variables and no others? i.e A linear law is presented with a R2 of only 0.5265...is that representative of a linear behaviour?

Modelling scale looks too broad for this type of applications (National). What about the details? In this sense, authors remarked that the mechanisms influencing Water Supply and Sanitation are too complex because of the cross-interaction between multiple factors and issues. I don’t personally think that this type of broad or general scale models can help for modelling Water Supply and Sanitation. Even more, because these problems have a very strong local nature and they have many peculiarities.

I am going to stop here because I don’t want to be too extensive but much more negative comments come to my mind after carefully have read the manuscript.

SPECIFIC COMMENTS

Fig. 7 is not clear and should be improved.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 2481, 2013.