

Interactive comment on “Water Food Energy Nexus: Changing Scenarios in India during recent Decades” by Beas Barik et al.

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This is a timely and relevant contribution to the scientific literature and to broader understanding of water-energy-food nexus dynamics in India.

The team has done a solid job analyzing and integrating multiple data sources. The text is, in general, well written and the figures are revealing and clearly presented.

The findings from analysis of GRACE data as well electricity usage being uncorrelated to monsoon rainfall are novel and should be highlighted.

The calls for judicious regulation are not in themselves new, but these implications of the study can be further strengthened.

With reference to page/line numbers:

C1

1/28 - lack of correlation found between electricity usage and monsoon rainfall is crucially important and requires further explanation

1/32 - what mechanisms are proposed for judicious regulation and control?

2/29 - cite Scott, C. A., & Sharma, B.R. (2009). Energy supply and the expansion of groundwater irrigation in the Indus-Ganges Basin. International Journal of River Basin Management, 7(2), 119-124.

5/7 - while I find the selection of sub-regions to be appropriate, selection criteria should be described

7/16 - this is not my expertise area, but very good to see that validation has been conducted

9/3 - expand further on "A grave situation has been created where food security is maintained at the expense of ground water and energy security" – very important point

11/12 - this section is well done

throughout the manuscript be consistent with usage of groundwater (single, compound word), not ground water (as two separate words)

16/8 - this discussion of groundwater, cropping (cash crops vs. staples), etc. should be related to (and cited as): Shah, T., Scott, C.A., & Buechler, S.J. (2004). Water sector reforms in Mexico: Lessons for India's new water policy. Economic and Political Weekly, 361-370.

The tables and figures are well done.

The supplement is perhaps too extensive, but for online dissemination space is no constraint, so this should be retained.