

Interactive comment on “Performance analysis of the proposed Reservoir Project in the State of West Bengal” by D. Roy and D. Banerjee

Anonymous Referee #1

Received and published: 14 April 2010

GENERAL COMMENTS:

The overall quality of the paper is good. The paper is clearly structured and the results are properly discussed. I am not a native English speaker, but I feel the paper needs to be proofread and polished by a native English speaker.

SPECIFIC/SCIENTIFIC COMMENTS:

Page 1376, Line 1: deterministic DP. Please explain what DP stands for.

Page 1378,

2 Study area Please provide general description of the D. basin such as mean annual precipitation, temperature, evaporation.

C520

Fig. 1: This figure is not acceptable. It doesn't provide useful information regarding the location of the D. river basin. It also misses the legend, scale and north arrow. Please also provide the source of this satellite image.

Line 9, Geologically, the upper... It should be 'geographically'.

Line 15, Does I&WD stand for Irrigation & Waterways Department? I couldn't find the full name of I&WD in the paper.

Line 22, please specify daily or monthly discharge data. It will be helpful to list available data in a table format rather than the current text description. The list should include: 1) data item; 2) source of data; 3) availability (e.g. 1990-2000) and 4) temporal scale (e.g. daily or monthly).

Page 1379,

Fig. 2: This figure misses a scale bar and a north arrow. The numbers are hard to read.

Page 1380,

Line 4, 'command area', is this referring to the 'study area'?

Line 24, 19.38Mm³, is this a monthly or annual figure? Please specify.

Page 1381,

Line 15, The Reservoir storage table should be labelled as a table. What is 'ham'?

Line 18, 'If this process is considered stationary' Can you comment on impact of climate change or variability on the projected stream flow? Is the study area susceptible to climate change or variability in the next 50 years or the life time of the reservoir project?

Page 1383, The 12-year historical record is short and insufficient to draw the statistical mean and SD. Under the condition of short historical record, one needs to bear in mind that the conclusion the study is drawn upon is compromised.

C521

Page 1384, Line 13, '(436.09–354.45)', please explain the figure '354.45'.

TECHNICAL CORRECTIONS: Please consider to rephrase or modify sentences listed as follows:

Page 1375, Line 18: are. Acres model (Sigvaldson, 1976)

Page 1376, Line 14: areas of the Volta Basin, Ghana and Burkina Faso, Ghana.

Page 1377, Line 22-24: Again it may also be noted that since its inception in 1938, Snyder's method...

Page 1380, Line 23-24, 'Irrigation and Waterways Department, Govt. of West Bengal', change to 'I&WD, Govt. of West Bengal'.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 1373, 2010.