

Combined Impacts of Climate and Land use Changes on Long-Term Streamflow in the Upper Halda Basin, Bangladesh

Farzana Raihan ^{1,2, *}, Gabrijel Ondrasek ³, Mohammad Shahidul Islam ⁴, Joseph M. Maina ⁵ and Linda J. Beaumont ²

2

¹ Department of Forestry and Environmental Sciences, Shahjalal University of Science and Technology, Sylhet 3114, Bangladesh

² Department of Biological Sciences, Macquarie University, North Ryde, NSW 2109, Australia; linda.beaumont@mq.edu.au

³ Faculty of Agriculture, University of Zagreb, 10000 Zagreb, Croatia; gondrasek@agr.hr

⁴ Department of Statistics, Shahjalal University of Science and Technology, Sylhet 3114, Bangladesh; shahed.stat@gmail.com

⁵ Department of Earth and Environmental Sciences, Macquarie University, North Ryde, NSW 2109, Australia; joseph.mbui@mq.edu.au

* Correspondence: fraihan-for@sust.edu

Table S1. List of Regional Climate Models (RCMs) and of their associated Global Climate Models (GCMs) used in this study.

Institute	Name	GCM	RCM	Reference
Commonwealth Scientific and Industrial Research Organisation, Australia	Australian Community Climate and Earth System simulator	ACCESS1.0	CCAM-1391M	(Bi <i>et al.</i> , 2013)
National Centre for Atmospheric Research	The Community Climate System Model	CCSM4.0	CCAM-1391M	(Gent <i>et al.</i> , 2011)
National Centre for Meteorological Research	Coupled Global Climate Model Version-5	CNRM-CM5	CCAM-1391M	(Voldoire <i>et al.</i> , 2013)
Max Planck Institute for Meteorology	Max Planck Institute for Meteorology-Earth System Model	MPI-ESM-LR	CCAM-1391M	(Giorgetta <i>et al.</i> , 2013)
Irish Centre for High-End Computing, EC-Earth Consortium	Irish Centre for High End Computing	ICHEC-EC-EARTH	RCA4	(Samuelsson <i>et al.</i> , 2011)

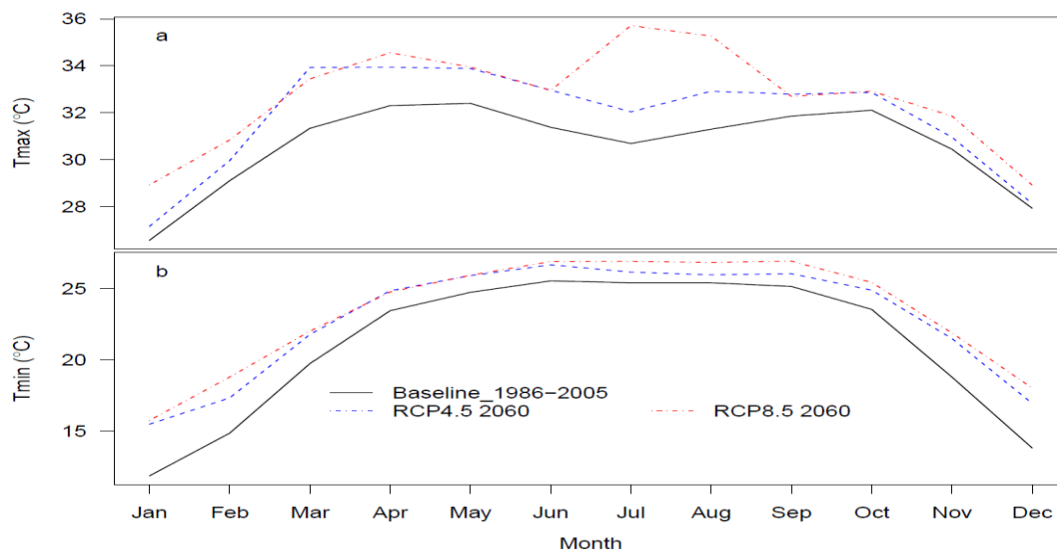


Figure S1. Mean monthly multi-model future temperature projection for RCP4.5 and 8.5 scenarios.

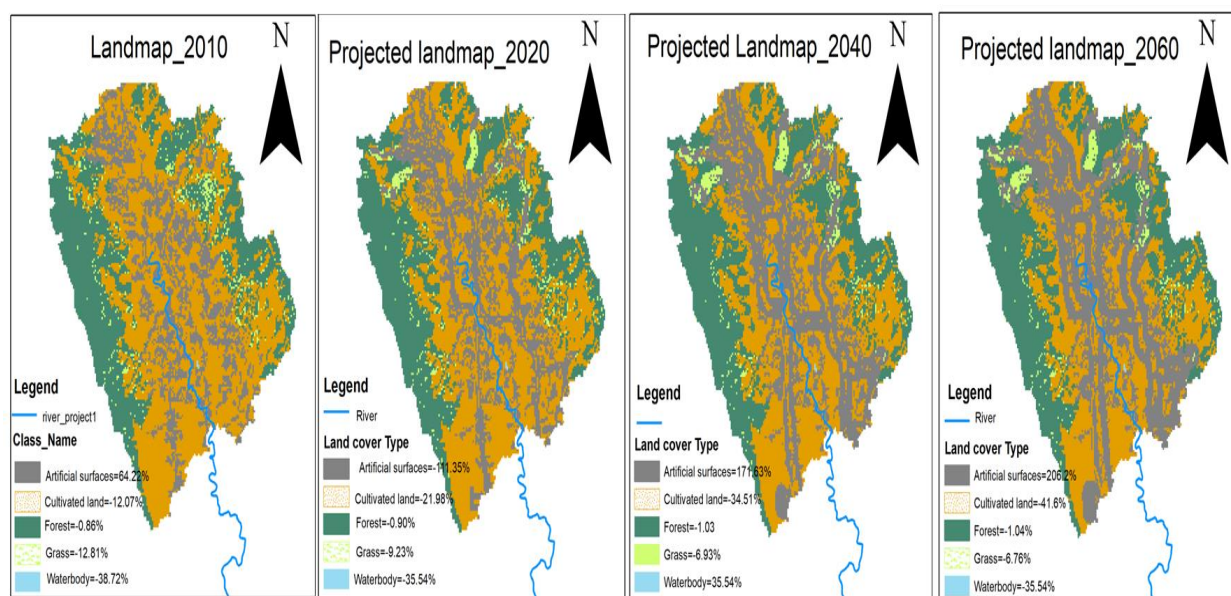


Figure S2. Future land use/landcover maps arranged from 2010 to 2060.