

1 **Supplementary materials for**

2 **Extreme Weather Expands Women's Autonomy Where Households are Labor-Constrained:**
3 **Evidence on the Impact of Droughts in Bangladesh**

4 **The PDF file includes**

5 Notes on authors' calculations of Standardized Precipitation Evapotranspiration Index (SPEI)

6 Figure S1

7 Tables S1, S2 and S3

1 **SPEI calculation**

2 The Standardized Precipitation Evapotranspiration Index (SPEI) uses inputs of total monthly
3 precipitation, average monthly temperature, and location latitude from NASA POWER to com-
4 pute the potential evapotranspiration and climatic water balance, which are then used as inputs
5 for R's "ClimClass" and "SPEI" packages. Potential evapotranspiration can be calculated using
6 the Thornthwaite, Hargreaves or Penman-Monteith equation; we use the Thornthwaite method
7 due to the availability of regular temperature measurements. From these inputs, the model re-
8 turns a monthly, location-dependent value of SPEI between -3.0 and $+3.0$. The mean of the
9 SPEI is 0, and the standard deviation is 1. The SPEI was proposed by Vicente-Serrano, Be-
10 guería and López-Moreno (2010).(43) More information about the index can also be found at
11 <https://spei.csic.es/index.html>.

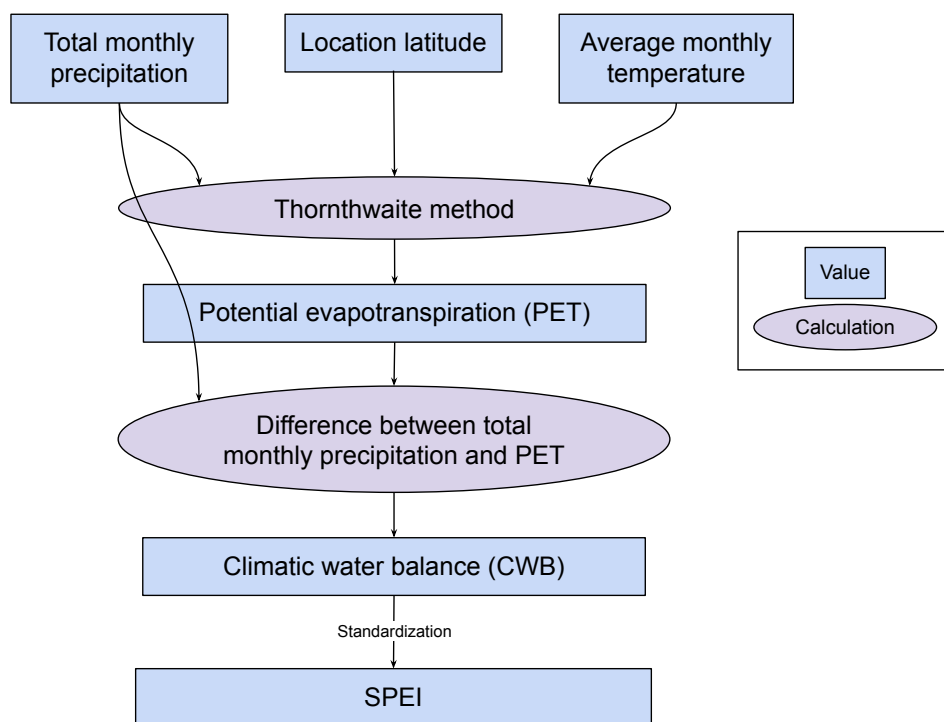


Figure S1: SPEI Inputs

1 Supplementary tables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Worked in past year	Currently working	Working, not for family	Decision: Own healthcare	Decision: Large HH purchases	Decision: Visit family	DV justified
Urban	0.00319 (0.00887)	0.00465 (0.00871)	0.0591*** (0.00620)	0.0662*** (0.00712)	0.0816*** (0.00708)	0.0829*** (0.00759)	-0.0596*** (0.00803)
Observations	78,170	78,165	72,376	74,771	74,772	74,765	66,690
Rural mean	0.32	0.30	0.11	0.62	0.61	0.63	0.30

Notes: Standard errors clustered at the level of the DHS sampling cluster grouped by survey wave. All specifications include controls for DHS wave and division. Survey sampling weights are used, reweighted by the sample size of each survey wave (see Section 5 for more details). *** p<0.01, ** p<0.05, * p<0.1

Table S1. Female autonomy: Comparing urban and rural households

	(1) No. of HH members (de facto)	(2) No. of HH members (de jure)	(3) Wealth quintile	(4) HH head is female
Urban	-0.113*** (0.0417)	-0.109*** (0.0375)	1.328*** (0.0408)	-0.0110** (0.00441)
Observations	78,162	78,162	78,175	78,175
Rural mean	5.419	5.170	2.675	0.117

Notes: Column (1) refers to the number of persons who stayed in the household the night before the interview, whether usual residents or visitors. Column (2) refers to the number of persons who are usual residents of the household, whether or not they stayed in the household the night before the interview. Standard errors clustered at the level of the DHS sampling cluster grouped by survey wave. All specifications include controls for DHS wave and division. Survey sampling weights are used, reweighted by the sample size of each survey wave (see Section 5 for more details). National wealth quintiles are compiled by the DHS based on household scores computed using the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, and housing characteristics such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. *** p<0.01, ** p<0.05, * p<0.1

Table S2. Household structure: Comparing urban and rural households

	Sample size	Any duration	Duration > 1 month
Urban	27,729	0.313	0.065
Rural	50,443	0.289	0.025
Overall	78,172	0.298	0.039

Table S3. Fraction of sample exposed to dry weather shock