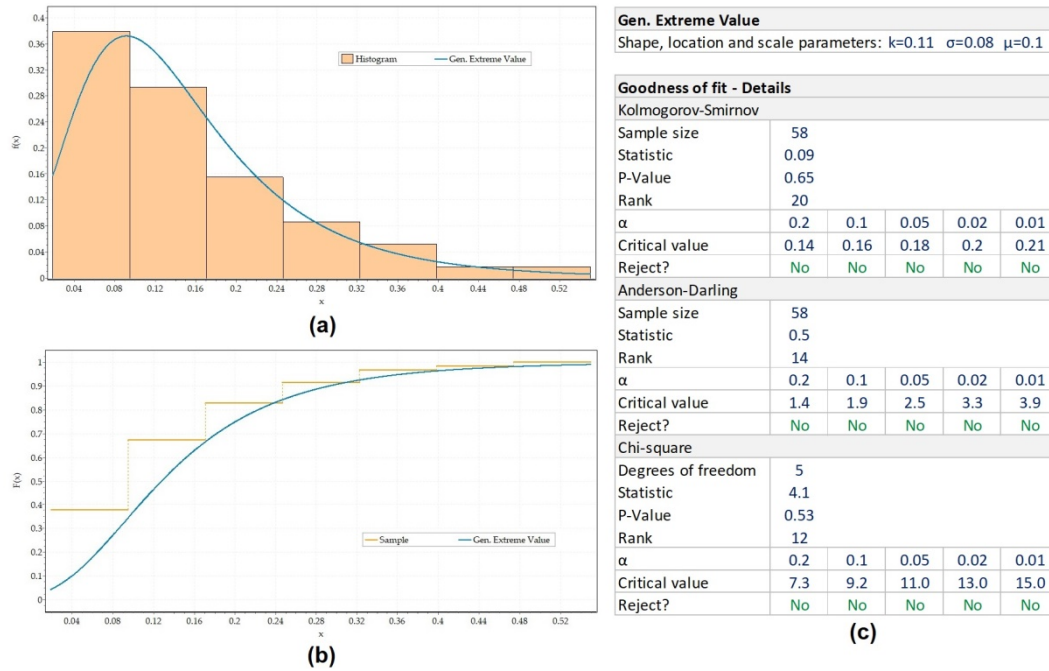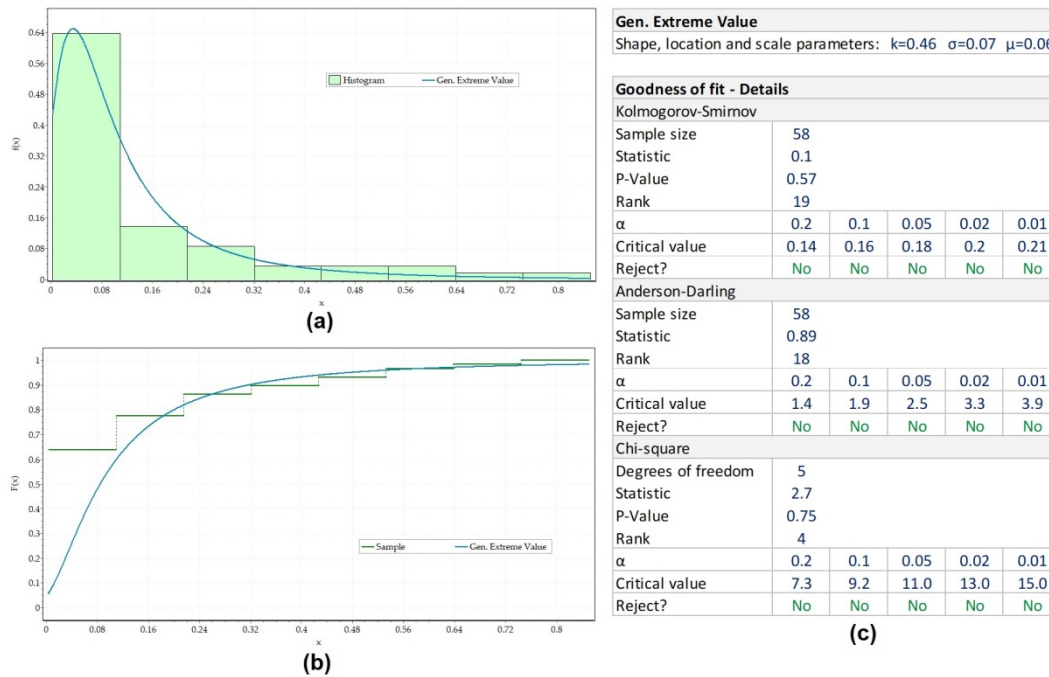**Figures S1-S4.** Fit of the GEV distribution to drought hazard, exposure, vulnerability and risk indices.

Figure S1. Fit of the GEV distribution to drought hazard indices: (a) Probability distribution function; (b) Cumulative distribution function; and (c) Parameters and goodness of fit tests.

Figure S2. Fit of the GEV distribution to drought exposure indices: (a) Probability distribution function; (b) Cumulative distribution function; and (c) Parameters and goodness of fit tests.

Figure S3

Gen. Extreme Value
Shape, location and scale parameters: k=0.14 σ=0.07 μ=0.1

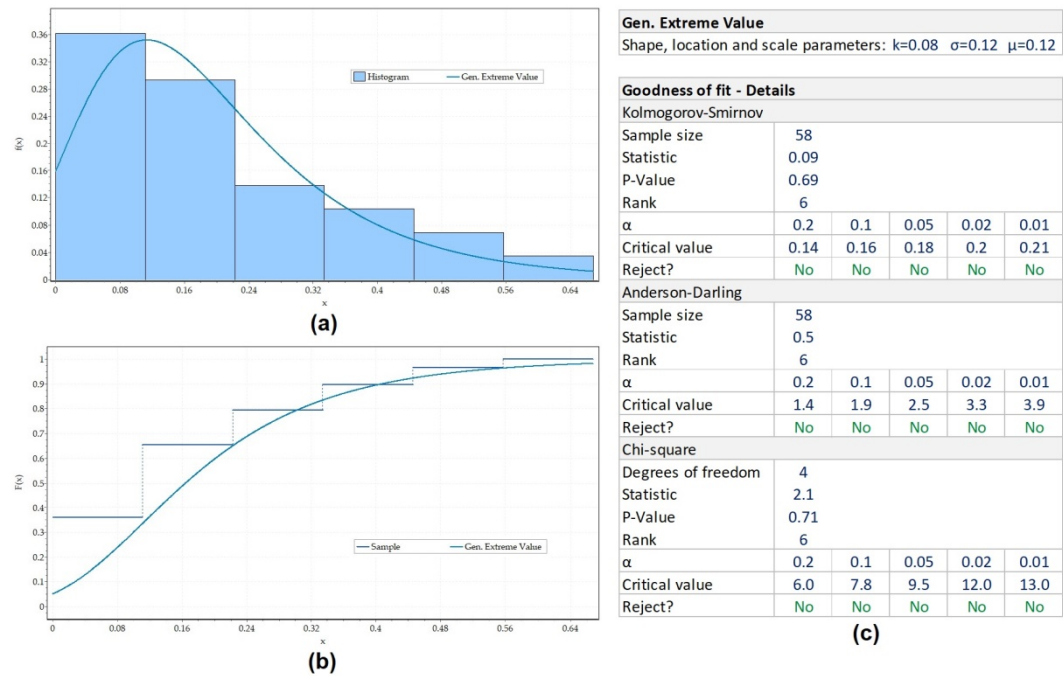**Goodness of fit - Details**

Kolmogorov-Smirnov

Sample size	58				
Statistic	0.06				
P-Value	0.98				
Rank	9				
α	0.2	0.1	0.05	0.02	0.01
Critical value	0.14	0.16	0.18	0.2	0.21
Reject?	No	No	No	No	No

Anderson-Darling

Sample size	58				
Statistic	0.16				
Rank	5				
α	0.2	0.1	0.05	0.02	0.01
Critical value	1.4	1.9	2.5	3.3	3.9
Reject?	No	No	No	No	No

Chi-square

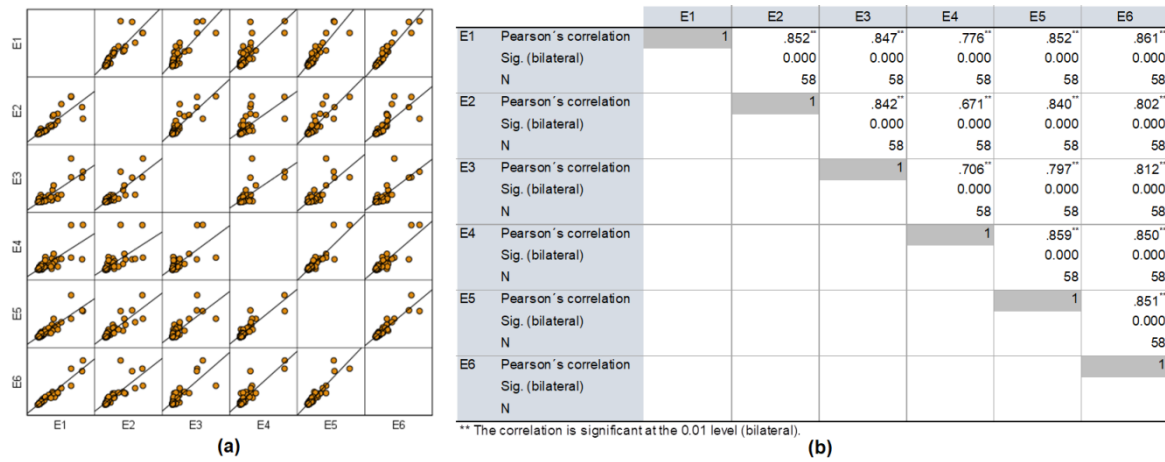|					
Degrees of freedom	5				
Statistic	3.6				
P-Value	0.6				
Rank	28				
α	0.2	0.1	0.05	0.02	0.01
Critical value	7.3	9.2	11.0	13.0	15.0
Reject?	No	No	No	No	No

(c)

Figure S3. Fit of the GEV distribution to drought vulnerability indices: (a) Probability distribution function; (b) Cumulative distribution function; and (c) Parameters and goodness of fit tests.
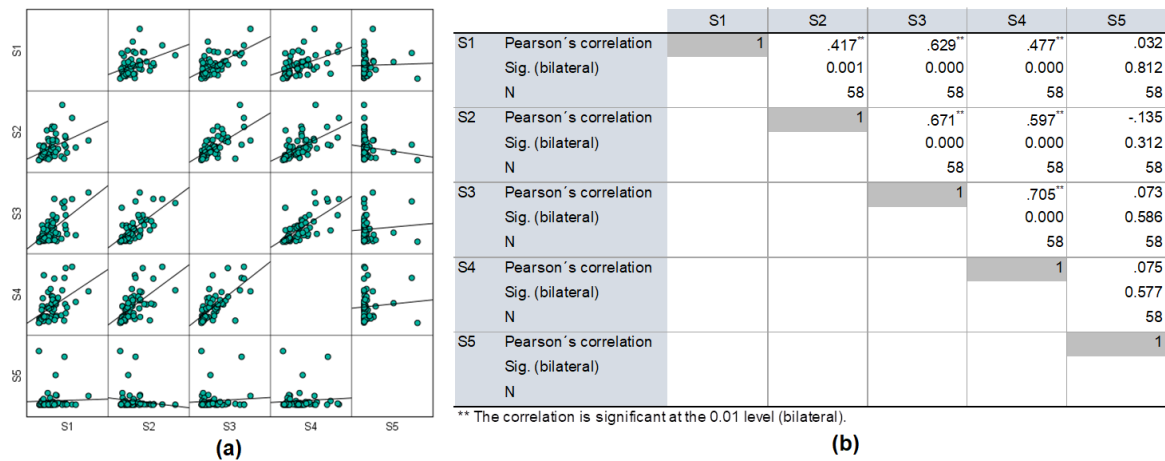
Figure S4

Gen. Extreme Value
Shape, location and scale parameters: k=0.08 σ=0.12 μ=0.12

Goodness of fit - Details

Kolmogorov-Smirnov

Sample size	58				
Statistic	0.09				
P-Value	0.69				
Rank	6				
α	0.2	0.1	0.05	0.02	0.01
Critical value	0.14	0.16	0.18	0.2	0.21
Reject?	No	No	No	No	No

Anderson-Darling

Sample size	58				
Statistic	0.5				
Rank	6				
α	0.2	0.1	0.05	0.02	0.01
Critical value	1.4	1.9	2.5	3.3	3.9
Reject?	No	No	No	No	No

Chi-square

Degrees of freedom	4				
Statistic	2.1				
P-Value	0.71				
Rank	6				
α	0.2	0.1	0.05	0.02	0.01
Critical value	6.0	7.8	9.5	12.0	13.0
Reject?	No	No	No	No	No

(c)

Figure S4. Fit of the GEV distribution to drought risk indices: (a) Probability distribution function; (b) Cumulative distribution function; and (c) Parameters and goodness of fit tests.
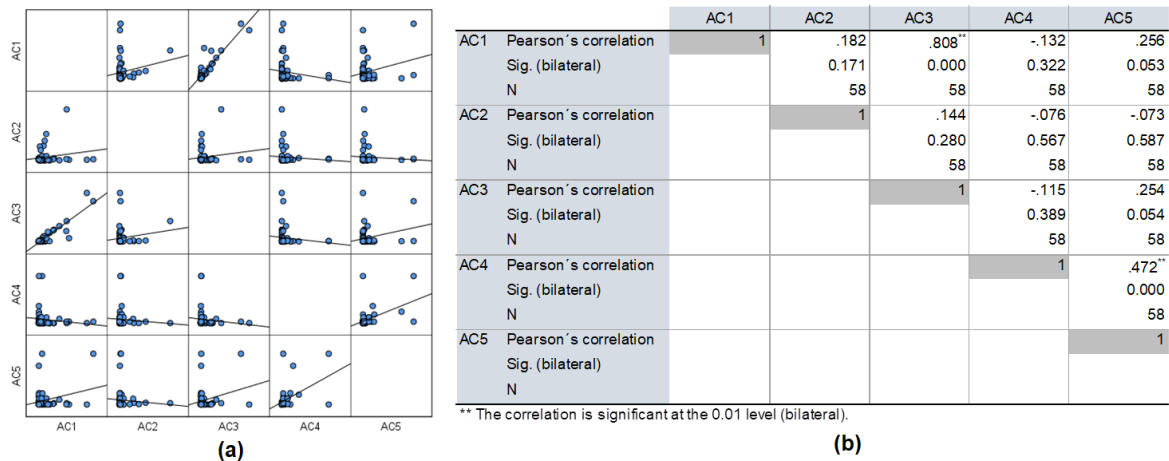
Figures S5-S7. Multicollinearity analysis of drought exposure, sensitivity and adaptive capacity indicators.

		E1	E2	E3	E4	E5	E6
E1	Pearson´s correlation	1	.852**	.847**	.776**	.852**	.861**
	Sig. (bilateral)		0.000	0.000	0.000	0.000	0.000
	N		58	58	58	58	58
E2	Pearson´s correlation		1	.842**	.671**	.840**	.802**
	Sig. (bilateral)			0.000	0.000	0.000	0.000
	N			58	58	58	58
E3	Pearson´s correlation			1	.706**	.797**	.812**
	Sig. (bilateral)				0.000	0.000	0.000
	N				58	58	58
E4	Pearson´s correlation				1	.859**	.850**
	Sig. (bilateral)					0.000	0.000
	N					58	58
E5	Pearson´s correlation					1	.851**
	Sig. (bilateral)						0.000
	N						58
E6	Pearson´s correlation						1
	Sig. (bilateral)						
	N						

** The correlation is significant at the 0.01 level (bilateral).

(a)   (b)

Figure S5. Multicollinearity analysis of drought exposure indicators: (a) Correlation charts; and (b) Pearson's correlation coefficients.

		S1	S2	S3	S4	S5
S1	Pearson´s correlation	1	.417**	.629**	.477**	.032
	Sig. (bilateral)		0.001	0.000	0.000	0.812
	N		58	58	58	58
S2	Pearson´s correlation		1	.671**	.597**	-.135
	Sig. (bilateral)			0.000	0.000	0.312
	N			58	58	58
S3	Pearson´s correlation			1	.705**	.073
	Sig. (bilateral)				0.000	0.586
	N				58	58
S4	Pearson´s correlation				1	.075
	Sig. (bilateral)					0.577
	N					58
S5	Pearson´s correlation					1
	Sig. (bilateral)					
	N					

** The correlation is significant at the 0.01 level (bilateral).

(a)   (b)

Figure S6. Multicollinearity analysis of drought sensitivity indicators: (a) Correlation charts; and (b) Pearson's correlation coefficients.

		AC1	AC2	AC3	AC4	AC5
AC1	Pearson´s correlation	1	.182	.808**	-.132	.256
	Sig. (bilateral)		0.171	0.000	0.322	0.053
	N		58	58	58	58
AC2	Pearson´s correlation		1	.144	-.076	-.073
	Sig. (bilateral)			0.280	0.567	0.587
	N			58	58	58
AC3	Pearson´s correlation			1	-.115	.254
	Sig. (bilateral)				0.389	0.054
	N				58	58
AC4	Pearson´s correlation				1	.472**
	Sig. (bilateral)					0.000
	N					58
AC5	Pearson´s correlation					1
	Sig. (bilateral)					
	N					

** The correlation is significant at the 0.01 level (bilateral).

(a)　　　　　　　　　　(b)

Figure S7. Multicollinearity analysis of adaptive capacity indicators: (a) Correlation charts; and (b) Pearson's correlation coefficients.

Table S1. Municipalities that comprise the state of Zacatecas.

No.	Municipality	Surface		Population		Rainfed Agricultural Area	
		Km²	% State	No. Inhabitants	% State	ha	% State
1	Apozol	290.04	0.4	6,260	0.4	2,836	0.3
2	Apulco	200.55	0.3	4,942	0.3	1,852	0.2
3	Atolinga	278.43	0.4	2,277	0.2	2,515	0.2
4	Benito Juárez	325.66	0.4	4,493	0.3	2,535	0.2
5	Calera	383.27	0.5	45,759	2.8	19,134	1.8
6	Cañitas de Felipe Pescador	444.59	0.6	8,255	0.5	12,914	1.2
7	Concepción del Oro	2,392.58	3.2	12,115	0.8	3,162	0.3
8	Cuauhtémoc	320.98	0.4	13,466	0.8	4,723	0.4
9	Chalchihuites	891.11	1.2	10,086	0.7	13,990	1.3
10	Fresnillo	5,037.31	6.8	240,532	14.6	108,182	10.3
11	Trinidad García de la Cadena	304.27	0.4	3,362	0.2	1,930	0.2
12	Genaro Codina	786.42	1.1	8,168	0.5	6,339	0.6
13	General Enrique Estrada	195.57	0.3	6,644	0.4	11,375	1.1
14	General Fco. R. Murguía	4,783.82	6.4	20,191	1.4	46,797	4.4
15	El Plateado de Joaquín Amaro	349.99	0.5	1,579	0.1	1,650	0.2
16	General Pánfilo Natera	437.37	0.6	23,526	1.5	14,707	1.4
17	Guadalupe	808.32	1.1	211,740	12.0	28,370	2.7
18	Huanusco	368.61	0.5	4,547	0.3	4,092	0.4
19	Jalpa	710.86	1	25,296	1.5	6,365	0.6
20	Jerez	1,526.91	2.1	59,910	3.8	19,953	1.9
21	Jiménez del Teul	1,158.41	1.6	4,465	0.3	3,370	0.3
22	Juan Aldama	616.92	0.8	19,749	1.4	26,880	2.6
23	Juchipila	335.37	0.5	12,251	0.8	3,491	0.3
24	Loreto	424.66	0.6	53,709	3.4	12,460	1.2
25	Luis Moya	175.03	0.2	13,184	0.8	4,308	0.4
26	Mazapil	11,987.60	16.1	17,774	1.1	13,238	1.3
27	Melchor Ocampo	1,862.05	2.5	2,736	0.2	754	0.1
28	Mezquital del Oro	482.01	0.6	2,451	0.2	1,736	0.2
29	Miguel Auza	1,093.92	1.5	23,713	1.5	54,527	5.2
30	Momax	160.17	0.2	2,446	0.2	921	0.1
31	Monte Escobedo	1,582.98	2.1	8,683	0.6	6,801	0.6
32	Morelos	178.98	0.2	13,207	0.8	10,611	1.0
33	Moyahua de Estrada	535.27	0.7	4,530	0.3	3,011	0.3
34	Nochistlán de Mejía	869.31	1.2	27,945	1.8	9,349	0.9
35	Noria de Ángeles	404.2	0.5	16,284	1.1	5,760	0.5
36	Ojocaliente	637.99	0.9	44,144	2.7	23,433	2.2

No.	Municipality	Surface		Population		Rainfed Agricultural Area	
		Km²	% State	No. Inhabitants	% State	ha	% State
37	Pánuco	674.94	0.9	17,577	1.1	21,413	2.0
38	Pinos	3,135.80	4.2	72,241	4.6	95,086	9.0
39	Río Grande	1,818.75	2.4	64,535	4.1	79,812	7.6
40	Sain Alto	1,399.61	1.9	21,844	1.4	32,142	3.1
41	El Salvador	617.24	0.8	2,509	0.2	3,202	0.3
42	Sombrerete	3,593.56	4.8	63,665	3.9	141,375	13.4
43	Susticacán	197.48	0.3	1,365	0.1	102	0.0
44	Tabasco	406.05	0.5	16,588	1.0	3,151	0.3
45	Tepechitlán	539.12	0.7	8,321	0.6	3,255	0.3
46	Tepetongo	716.92	1	6,490	0.4	4,094	0.4
47	Teúl de González Ortega	673.05	0.9	5,356	0.3	4,115	0.4
48	Tlaltenango de Sánchez R.	738.55	1	27,302	1.7	3,846	0.4
49	Valparaíso	5,647.40	7.6	32,461	2.1	25,840	2.5
50	Vetagrande	158.24	0.2	10,276	0.6	6,923	0.7
51	Villa de Cos	6,597.04	8.9	34,623	2.2	67,232	6.4
52	Villa García	338.23	0.5	19,525	1.2	8,011	0.8
53	Villa González Ortega	427.38	0.6	13,208	0.8	14,000	1.3
54	Villa Hidalgo	371.43	0.5	19,446	1.2	9,185	0.9
55	Villanueva	2,156.51	2.9	31,558	1.9	19,114	1.8
56	Zacatecas	436.79	0.6	149,607	9.3	7,497	0.7
57	Trancoso	218.45	0.3	20,455	1.2	8,427	0.8
58	Santa María de la Paz	275.67	0.4	2,767	0.2	1,917	0.2
	Total	**74,479.71**	**100.0**	**1,622,138**	**100.0**	**1,053,807**	**100.0**

Source: Developed by the authors with information from INEGI and SIAP.