

Table SPBS-3

## S&amp;E articles in agricultural sciences, fractional count, by region, country, or economy: 1996–2020

(Number)

Region, country, or economy	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
World	17,899.00	18,435.00	18,640.00	19,292.00	21,009.00	19,347.00	21,373.00	21,940.00	23,686.00	25,491.00	27,472.00	31,726.00	34,874.00	35,721.00	37,368.00	39,266.00	42,117.00	44,949.00	46,042.00	47,232.00	50,465.00	53,820.00	57,137.00	61,911.00	69,075.00
North America	5,506.98	5,460.56	5,276.69	5,058.66	5,950.18	5,067.39	5,562.43	5,615.73	6,324.86	6,112.32	6,144.26	6,725.34	6,862.43	6,385.36	6,491.44	6,301.01	6,598.83	6,255.15	6,285.72	6,406.51	6,579.84	7,069.05	7,150.00	7,416.98	7,825.50
Canada	1,004.86	973.18	963.72	840.17	925.10	805.97	875.76	904.20	1,050.93	880.20	1,037.97	1,065.26	1,075.22	1,064.85	1,067.71	1,070.91	1,104.59	1,057.75	1,178.25	1,079.92	1,085.68	1,144.11	1,100.97	1,147.28	1,150.51
Greenland	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.06	0.10	0.08	0.17	0.10	0.52	0.00	0.00	0.00	0.13	0.00
Mexico	83.81	94.20	108.85	91.77	135.58	141.63	174.29	176.60	224.08	226.41	262.23	294.17	350.99	403.67	402.53	559.19	491.80	467.79	518.23	524.94	552.26	693.94	745.61	820.24	924.11
United States	4,418.31	4,393.18	4,204.12	4,126.73	4,889.49	4,119.29	4,512.38	4,534.93	5,049.86	5,005.71	4,844.06	5,365.67	5,436.23	4,916.83	5,021.15	4,670.81	5,002.35	4,729.46	4,589.14	4,801.12	4,941.90	5,230.99	5,303.42	5,449.33	5,750.87
Central America and Caribbean	103.22	98.99	105.98	97.23	97.01	102.32	129.78	109.16	97.25	151.18	127.38	133.02	163.42	109.27	121.95	210.80	228.19	165.87	182.11	149.46	201.72	119.65	153.72	112.16	120.96
Antigua and Barbuda	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bahamas, The	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.07	0.57
Barbados	0.25	1.10	1.67	0.00	0.69	0.00	3.00	0.00	5.50	0.58	0.00	0.33	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.08	0.00	0.00	0.00	0.96
Belize	0.13	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83	2.83	0.00	0.00	0.00	0.00	1.08	0.00	0.00	1.00	0.24	0.00
Costa Rica	6.86	7.64	7.43	2.70	1.33	8.13	6.39	1.72	5.45	16.12	6.24	7.55	14.59	7.89	8.73	8.18	13.75	6.12	11.54	10.86	16.10	20.06	18.73	17.72	24.57
Cuba	54.85	51.41	59.67	59.60	60.47	59.54	68.83	64.87	54.59	72.66	68.80	71.58	89.73	69.99	46.69	127.59	158.01	110.08	105.89	89.01	107.82	50.50	67.64	32.15	39.42
Dominica	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.20	0.00	0.00	0.17	0.00	0.00	0.00
Dominican Republic	1.37	0.13	0.39	0.00	0.13	0.00	0.20	0.38	0.20	0.00	0.10	0.00	1.50	0.38	0.88	1.69	0.20	0.90	0.83	1.61	2.59	0.00	1.28	0.85	0.97
El Salvador	0.43	0.25	0.33	0.00	0.00	1.00	0.50	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.03	0.00	0.33	1.17	0.83	1.70	0.67
Grenada	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	2.00	0.00	1.00	0.80	1.70	4.08	0.17
Guatemala	0.50	0.00	2.17	0.54	0.17	0.00	1.00	0.11	2.63	1.73	2.93	0.37	0.23	2.00	0.45	2.00	0.29	0.61	1.14	1.38	10.07	6.91	4.50	1.44	4.63
Haiti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.33	0.00	0.20	0.42	2.00	3.67	0.00	0.78	0.29	0.20	0.00	0.33
Honduras	1.88	2.25	1.20	5.78	2.17	1.00	2.08	1.57	1.09	0.58	1.89	0.45	2.50	0.42	1.10	0.50	0.47	0.00	0.58	2.26	0.33	2.93	1.07	3.56	2.36
Jamaica	2.79	2.50	2.64	1.75	2.58	3.00	3.17	2.72	4.12	3.92	3.00	2.25	6.83	3.36	2.92	5.50	7.02	3.53	4.50	2.86	3.29	2.42	4.90	2.39	8.44
Nicaragua	2.08	0.50	0.40	0.30	0.33	1.00	0.30	0.31	1.03	3.11	1.50	0.62	0.66	1.28	0.83	2.96	2.21	1.04	0.83	1.18	0.16	3.16	0.50	0.33	1.79
Panama	0.42	0.00	0.50	0.67	0.00	0.11	0.20	0.33	0.00	4.52	1.70	1.33	1.13	2.04	3.98	6.03	3.72	4.20	8.31	4.71	4.61	1.92	6.88	4.56	4.19
Puerto Rico	23.50	20.47	17.58	19.56	24.42	19.18	27.15	30.63	16.97	28.83	31.76	35.55	36.28	10.28	39.02	36.98	19.76	24.95	23.72	21.22	38.04	12.17	30.33	28.41	19.77
Saint Kitts and Nevis	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.07	1.00	0.08	0.28	1.55	0.20	1.43	3.35	1.32
Saint Lucia	0.00	0.50	0.75	0.25	0.00	0.00	0.00	0.00	0.33	0.33	0.33	0.33	0.00	0.00	0.00	1.25	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Saint Vincent and the Grenadines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trinidad and Tobago	7.92	11.42	11.00	5.83	4.72	9.35	16.96	6.52	5.00	18.45	9.12	12.67	9.67	8.96	13.58	16.52	20.69	10.43	18.77	13.01	13.95	16.96	12.39	11.32	10.82
South America	636.56	841.87	973.63	1,099.06	1,262.49	1,109.78	1,469.33	1,364.60	1,572.59	1,742.22	3,016.44	3,585.77	4,513.70	5,035.87	5,376.45	5,768.66	6,019.36	6,377.54	6,637.73	6,247.14	6,475.44	6,921.81	7,255.44	7,582.09	7,873.97
Argentina	150.35	162.36	156.34	164.27	180.20	210.52	231.15	190.18	216.93	223.76	260.04	304.20	332.72	322.01	390.31	390.91	425.39	441.26	456.64	464.53	501.26	505.05	581.01	589.90	548.77
Bolivia	3.54	3.21	2.40	1.54	1.26	1.25	1.39	7.47	1.46	2.76	3.19	4.81	6.03	6.02	3.56	3.18	3.00	4.13	2.06	3.87	1.74	4.88	2.47	3.12	6.57
Brazil	406.46	542.22	726.78	741.20	895.78	730.07	1,017.29	957.51	1,122.08	1,253.84	2,430.79	2,900.96	3,735.54	4,161.84	4,465.84	4,823.86	5,004.20	5,318.63	5,504.60	5,145.68	5,246.63	5,516.00	5,752.77	5,981.76	6,120.15
Chile	19.43	26.52	17.76	37.88	26.11	28.60	46.22	47.01	61.66	79.31	106.36	131.86	116.44	187.05	172.41	185.84	202.01	192.78	184.31	200.94	243.44	254.11	229.83	286.83	305.85
Colombia	16.38	22.54	16.03	20.09	22.35	10.62	23.45	18.06	21.88	37.61	49.83	49.25	112.15	115.12	115.05	144.07	144.41	176.40	180.59	187.79	243.57	323.93	314.58	332.51	391.16
Ecuador	0.00	0.99	1.80	0.93	1.13	0.95	2.28	2.74	2.32	0.56	3.40	2.74	3.18	5.49	1.63	4.81	4.30	7.80	15.02	26.78	47.39	74.06	111.76	69.87	114.56
Guyana	0.00	1.30	0.50	0.07	0.22	0.00	0.11	0.50	2.11	0.00	2.21	1.70	0.03	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.25	0.00	0.00	0.00

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Region, country, or economy	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Paraguay	0.33	0.00	0.33	0.68	0.75	1.33	0.67	0.00	0.75	1.27	0.20	1.78	1.03	1.08	1.06	1.67	0.94	0.54	1.53	1.58	3.89	1.76	3.38	7.01	6.14
Peru	7.38	7.42	3.17	29.13	42.13	35.83	32.91	40.11	28.33	29.02	34.94	34.68	45.35	63.01	40.82	65.31	75.23	80.56	58.87	84.40	74.24	124.98	151.32	205.10	240.93
Suriname	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.61	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uruguay	11.63	12.67	14.25	13.72	11.98	16.27	19.86	14.58	22.73	16.14	28.22	21.43	33.40	35.61	44.95	47.85	50.23	54.87	67.49	57.15	60.49	65.83	78.79	78.37	86.42
Venezuela	21.07	62.64	34.27	89.55	80.59	74.01	93.99	86.44	92.33	97.96	97.26	132.35	127.82	138.64	140.82	101.17	109.52	99.88	166.61	74.42	52.80	51.21	29.29	27.54	53.41
Europe	6,530.25	6,686.98	6,887.20	7,170.63	7,266.65	6,988.06	7,531.73	7,958.27	8,140.34	9,027.71	9,144.63	10,463.47	11,234.97	11,538.59	11,348.08	11,884.96	12,945.07	13,553.06	13,015.53	13,551.95	14,184.65	14,129.59	14,521.12	15,612.16	17,514.31
EU-27 and UK <sup>a</sup>	5,678.36	6,006.34	6,129.71	6,213.28	6,467.33	6,152.47	6,511.98	6,777.21	6,809.37	7,583.67	7,773.24	9,057.01	9,813.60	9,985.34	9,982.81	10,344.39	11,151.83	11,915.01	11,305.91	11,741.47	12,162.71	11,850.04	12,203.97	13,045.59	14,616.49
UK	951.67	1,038.91	1,006.38	983.39	1,016.46	921.76	875.44	887.95	796.78	793.57	788.49	818.84	771.79	719.87	722.05	685.46	747.97	746.49	687.44	664.06	783.13	751.31	782.52	849.12	869.50
EU-27 <sup>b</sup>	4,726.69	4,967.43	5,123.32	5,229.89	5,450.86	5,230.71	5,636.55	5,889.26	6,012.59	6,790.09	6,984.75	8,238.17	9,041.80	9,265.47	9,260.75	9,658.93	10,403.86	11,168.52	10,618.46	11,077.42	11,379.58	11,098.73	11,421.45	12,196.47	13,746.99
Austria	64.06	88.61	73.41	84.04	78.17	85.38	102.79	95.86	78.71	92.83	112.87	96.09	112.46	127.94	130.87	130.09	144.07	149.05	162.41	167.74	174.01	169.14	209.43	201.39	191.75
Belgium	178.44	160.24	188.86	181.97	204.51	193.02	207.59	228.59	263.71	286.51	293.66	346.64	331.86	315.90	332.05	302.17	335.19	397.11	406.27	414.65	404.49	389.36	373.31	361.08	394.30
Bulgaria	23.33	31.23	11.58	24.67	23.48	14.37	14.08	14.11	17.37	22.29	20.34	38.30	94.92	74.68	76.63	80.25	117.50	206.81	148.61	149.77	117.20	98.12	139.24	193.57	228.17
Croatia	13.08	8.75	15.46	18.04	23.53	24.88	32.92	37.79	44.53	80.30	35.62	94.97	154.06	181.33	96.51	172.82	163.50	127.81	137.87	150.97	128.72	135.70	151.70	198.70	202.36
Cyprus	7.13	5.17	1.00	3.25	5.17	0.50	4.00	1.75	4.25	3.09	3.59	2.90	3.16	6.86	7.94	4.63	13.89	8.05	13.81	12.54	12.97	24.93	23.60	26.89	27.84
Czechia	185.63	195.69	158.87	180.40	184.20	203.51	203.57	163.29	176.80	159.24	220.30	480.17	514.72	551.83	634.99	643.86	647.65	757.43	564.09	671.47	695.21	621.05	574.39	573.12	452.25
Denmark	168.30	224.40	252.19	245.89	271.67	295.95	256.54	292.78	322.30	293.83	296.28	331.09	306.80	250.30	334.47	321.93	364.94	327.51	334.39	345.79	370.24	354.80	330.56	358.69	395.25
Estonia	6.92	3.87	1.88	8.42	4.64	2.55	4.00	8.55	7.43	12.13	21.64	17.21	29.35	21.66	21.59	40.32	46.73	33.02	48.75	34.21	36.06	35.17	49.95	52.74	61.65
Finland	154.25	172.95	157.06	141.73	148.92	163.70	202.85	154.72	181.69	180.52	199.37	187.97	196.28	186.14	182.71	177.10	171.73	175.74	155.98	165.53	159.84	139.43	167.28	174.19	175.48
France	741.08	690.52	783.47	788.91	796.83	747.81	710.64	738.65	773.13	769.77	829.04	832.49	884.28	887.59	896.32	857.54	945.22	847.25	915.53	876.20	895.37	893.78	898.59	902.78	909.42
Germany	978.98	978.10	979.96	1,017.64	980.03	1,012.70	967.72	953.01	968.65	1,115.55	1,007.13	1,015.56	1,084.60	1,102.45	1,083.42	1,122.36	1,270.01	1,266.45	1,229.77	1,284.94	1,302.71	1,252.44	1,341.82	1,330.25	1,421.64
Greece	111.61	111.82	116.37	132.41	168.48	163.03	190.84	176.13	170.33	234.85	264.12	275.97	277.64	258.92	274.79	226.62	277.40	290.56	245.48	234.90	253.07	286.62	249.02	305.65	327.48
Hungary	83.71	105.89	114.91	104.86	114.89	88.70	116.64	107.45	99.83	132.56	113.43	87.69	91.53	135.46	82.53	100.37	115.24	112.56	88.68	98.76	111.04	90.62	130.63	142.88	178.73
Ireland	83.99	101.55	151.54	147.06	174.63	159.90	169.14	160.39	161.03	185.40	229.90	190.19	264.92	273.11	295.05	256.67	274.96	297.49	287.16	254.47	286.73	310.54	329.73	352.50	318.00
Italy	340.99	382.41	361.96	365.74	433.00	378.07	527.88	747.05	630.21	809.89	738.10	1,213.83	1,174.13	1,305.15	1,188.46	1,170.15	1,241.35	1,639.65	1,435.06	1,643.58	1,697.14	1,720.55	1,815.94	2,010.91	2,571.70
Latvia	0.00	1.00	0.00	0.50	1.10	1.00	3.00	2.00	0.96	0.00	2.51	4.88	19.12	7.68	12.00	119.78	78.31	73.62	81.14	99.17	146.97	124.85	141.70	131.60	134.07
Lithuania	3.79	1.42	5.83	1.65	6.71	7.54	5.09	16.05	17.19	17.73	23.66	18.06	121.83	113.97	108.03	98.13	113.23	123.85	97.63	100.36	149.82	73.03	97.47	89.41	118.27
Luxembourg	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.03	0.70	0.00	0.74	1.49	0.79	3.75	5.17	5.10	6.91	9.75	6.51	4.96	10.64	3.43	8.11	6.32	5.15
Malta	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.67	1.00	0.20	1.00	0.00	0.00	0.70	0.43	0.10	1.33	1.38	2.44	5.83	3.87	4.80	5.35	10.80
Netherlands	347.66	441.44	411.44	372.18	396.13	297.27	365.02	369.69	350.55	378.41	422.79	451.61	421.18	393.53	392.21	424.04	430.21	451.18	500.43	456.42	507.73	418.49	473.85	499.03	554.46
Poland	205.48	152.31	177.29	244.15	234.00	296.12	286.07	259.80	330.99	401.64	363.21	464.00	615.00	616.43	678.90	717.27	770.23	855.39	973.20	1,045.60	1,065.80	1,147.51	1,085.63	1,214.45	1,485.84
Portugal	67.38	72.06	85.85	81.18	87.92	100.37	110.64	102.79	116.24	128.65	196.53	215.66	243.87	249.66	311.01	313.57	354.85	338.21	318.52	359.00	371.86	433.25	427.74	440.67	549.42
Romania	5.08	6.85	7.00	5.75	5.83	3.75	3.35	6.03	4.09	8.68	2.68	8.50	21.51	48.20	47.95	67.53	132.88	124.74	106.85	113.64	110.12	137.08	158.36	174.50	194.88
Slovakia	84.82	62.39	73.12	69.87	62.16	46.46	53.23	36.24	43.74	51.19	54.43	77.38	96.65	100.15	90.31	102.19	83.50	217.73	180.02	182.72	245.32	203.34	183.30	245.93	204.50
Slovenia	9.75	11.72	11.42	12.46	12.70	17.98	21.59	33.12	22.67	39.03	34.77	72.48	132.43	126.89	117.63	136.21	125.58	103.25	101.03	103.12	120.07	78.77	97.55	91.81	107.10
Spain	668.82	769.87	755.51	785.81	797.51	734.87	864.77	949.57	998.89	1,138.96	1,290.33	1,472.80	1,624.01	1,734.61	1,660.05	1,841.09	1,934.15	2,005.57	1,853.62	1,888.10	1,793.15	1,751.28	1,750.94	1,896.57	2,290.05

Table SPBS-3

## S&amp;E articles in agricultural sciences, fractional count, by region, country, or economy: 1996–2020

(Number)

Region, country, or economy	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Sweden	192.43	187.17	227.35	210.87	234.64	191.28	211.59	233.81	225.93	246.05	207.51	239.23	224.73	191.26	198.43	226.72	244.55	227.40	224.27	216.36	207.45	201.56	206.82	215.50	236.44
Other Europe	851.89	680.65	757.49	957.35	799.32	835.59	1,019.75	1,181.05	1,330.97	1,444.04	1,371.39	1,406.46	1,421.38	1,553.25	1,365.28	1,540.57	1,793.24	1,638.05	1,709.63	1,810.48	2,021.94	2,279.55	2,317.15	2,566.56	2,897.82
Other Europe, 2020 <sup>b</sup>	1,803.56	1,719.56	1,763.88	1,940.74	1,815.78	1,757.35	1,895.19	2,069.01	2,127.75	2,237.61	2,159.88	2,225.30	2,193.17	2,273.12	2,087.33	2,226.03	2,541.21	2,384.54	2,397.07	2,474.54	2,805.06	3,030.86	3,099.67	3,415.69	3,767.32
Albania	0.10	0.35	1.50	0.62	0.33	0.33	0.53	0.98	0.25	1.36	0.33	1.05	4.84	4.07	3.25	9.42	10.28	4.04	2.94	2.05	10.69	6.10	7.91	14.01	7.96
Andorra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Belarus	4.83	4.00	6.00	9.25	7.00	4.12	4.27	10.25	3.25	1.92	2.00	5.20	7.67	2.17	2.17	3.70	0.00	3.08	5.07	0.68	4.94	2.51	6.03	6.08	6.72
Bosnia and Herzegovina	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.20	0.58	0.00	1.00	7.74	5.74	5.63	9.74	18.48	10.68	11.29	13.89	10.53	16.38	24.57	13.81	21.82
Holy See (Vatican City)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iceland	3.42	4.40	1.53	3.24	5.97	6.78	8.27	2.81	9.73	7.76	7.85	11.17	8.33	6.42	16.15	17.91	12.80	7.43	9.14	6.59	10.74	10.01	7.44	10.96	7.01
Kosovo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.67	1.95	0.35	1.75	1.48	1.33	2.09	1.50	9.35	17.04	8.08	1.43
Liechtenstein	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Moldova	5.80	0.25	3.00	1.00	1.75	1.09	0.70	0.13	1.25	1.25	3.50	0.83	3.00	0.75	1.00	1.78	5.58	5.60	8.07	2.00	11.01	4.84	5.45	7.81	3.09
Monaco	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.13	0.20	0.50	0.00	0.83	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.38
Montenegro <sup>c</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	3.80	0.72	1.69	2.76	3.05	3.28	7.84	8.41	10.44	7.75
North Macedonia	0.00	0.00	0.00	0.00	1.00	1.00	2.09	0.00	0.00	0.47	2.60	2.45	3.96	2.52	1.88	16.98	8.83	13.05	14.60	11.03	26.47	23.55	19.27	18.45	11.30
Norway	81.53	97.55	90.07	117.24	102.14	99.11	90.64	107.18	132.80	142.55	147.95	170.44	158.17	155.18	149.90	166.79	183.45	149.13	162.05	155.54	141.70	151.01	150.63	149.88	187.95
Russia	377.01	193.95	221.09	160.92	211.93	179.68	196.63	176.89	179.04	172.57	173.50	171.81	167.37	186.16	171.09	159.01	145.67	157.32	177.12	209.02	236.96	387.81	377.51	514.61	644.18
San Marino	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Serbia <sup>c</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.27	50.54	75.55	92.00	149.95	345.30	188.30	188.24	192.09	179.37	196.06	165.03	185.47	188.67
Serbia and Montenegro <sup>d</sup>	10.00	13.50	9.95	13.63	19.00	15.10	10.35	11.73	16.52	32.59	28.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Switzerland	103.93	117.23	136.21	133.92	131.09	142.47	127.99	154.15	137.47	173.51	169.54	178.07	237.28	186.57	169.96	174.78	243.32	242.75	241.52	238.19	266.46	313.22	297.70	296.25	274.19
Turkey	244.02	237.63	275.98	508.34	309.94	373.94	570.44	706.86	843.90	895.64	830.54	819.51	758.21	917.02	745.14	816.94	799.99	829.68	856.40	944.36	1,070.43	1,075.12	1,131.61	1,189.25	1,360.97
Ukraine	21.25	11.78	11.99	9.19	9.16	11.96	7.51	10.07	6.57	13.60	5.21	11.54	13.31	9.95	5.17	8.60	17.06	22.83	29.08	28.88	47.84	74.73	98.53	141.49	173.89
Middle East	241.97	265.70	283.04	288.60	302.41	294.47	300.80	327.14	411.36	441.82	441.04	566.37	686.05	853.10	1,000.45	1,169.20	1,454.91	1,309.99	1,377.74	1,562.69	1,686.75	1,893.80	2,046.50	2,433.71	2,905.90
Armenia	0.67	1.00	1.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	0.50	0.00	0.00	0.42	0.00	0.15	1.40	1.17	2.33	1.33	5.00	3.17	3.13	2.58	4.29
Azerbaijan	0.00	0.00	1.00	0.00	0.17	0.25	0.00	0.50	0.00	0.00	2.33	2.00	0.50	1.00	2.67	1.39	1.12	2.47	1.80	5.02	3.66	4.10	7.07	7.18	10.74
Bahrain	0.00	0.33	3.95	0.75	1.00	0.00	0.33	0.00	2.00	1.00	0.33	0.00	2.40	0.00	1.00	0.00	1.50	0.67	0.50	0.00	0.67	1.00	1.00	0.96	2.70
Gaza Strip <sup>e</sup>	0.00	0.00	0.45	0.00	0.10	0.10	1.50	0.00	0.00	0.11	0.25	1.00	0.11	0.00	0.13	0.50	0.00	1.00	0.33	0.00	0.00	0.00	0.00	3.28	3.60
Georgia	1.33	2.00	2.00	2.50	0.00	2.50	1.00	2.40	1.00	4.25	4.00	3.58	0.00	1.00	4.80	4.19	1.53	3.31	3.35	0.14	1.00	3.06	4.28	6.83	6.36
Iran	22.85	28.17	21.08	39.92	42.03	39.29	60.80	84.33	139.90	173.00	225.18	298.23	408.86	571.76	707.57	820.78	1,094.46	944.52	1,030.10	1,179.30	1,295.92	1,444.99	1,535.90	1,693.81	2,002.02
Iraq	10.50	5.83	3.53	2.50	0.00	6.33	4.00	0.00	0.67	3.05	1.75	5.17	12.75	2.00	10.00	12.67	15.23	15.20	17.53	11.79	21.63	31.63	60.21	183.75	165.88
Israel	136.80	139.52	138.09	133.77	133.57	118.62	125.37	128.38	138.97	144.66	102.07	134.24	127.57	136.65	118.60	129.03	143.26	124.89	126.21	112.32	101.64	115.34	107.57	131.36	149.19
Jordan	8.65	18.84	29.43	32.63	28.91	34.29	38.42	43.08	50.48	34.09	28.22	43.39	51.64	48.92	34.65	48.34	39.91	49.88	33.40	36.53	45.53	56.95	68.31	79.00	73.39
Kuwait	2.75	7.50	7.05	5.90	14.70	6.05	5.00	4.38	10.23	5.17	3.42	7.24	6.18	3.19	5.22	6.11	5.56	8.87	6.14	9.50	12.83	11.17	11.18	15.10	15.95
Lebanon	6.37	4.83	6.48	5.46	15.08	15.19	6.63	11.64	7.35	9.47	8.38	7.64	14.36	10.33	17.08	12.87	12.54	6.92	18.03	13.18	15.28	20.77	29.72	29.47	35.01

Table SPBS-3

## S&amp;E articles in agricultural sciences, fractional count, by region, country, or economy: 1996–2020

(Number)

Region, country, or economy	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Oman	6.46	3.18	16.95	7.34	9.75	13.87	14.58	13.50	17.72	20.30	13.46	19.85	9.11	14.63	10.63	7.05	13.61	20.31	20.29	12.96	11.53	18.39	20.83	16.14	30.51
Qatar	0.00	0.10	0.00	2.00	1.00	1.50	2.00	1.00	1.00	0.00	0.00	0.50	1.67	0.56	1.00	2.50	1.23	1.94	2.65	3.97	4.13	4.51	3.70	10.66	10.45
Saudi Arabia	26.38	29.67	32.58	35.99	31.51	31.42	25.42	13.62	19.50	14.67	19.33	17.06	12.08	30.55	48.52	74.64	72.44	88.33	86.11	140.18	120.30	130.84	150.07	205.61	322.39
Syria	15.10	19.72	15.70	14.60	20.09	16.50	7.00	18.66	15.02	19.79	15.39	14.49	23.53	15.57	24.43	33.25	31.89	20.94	18.43	15.68	27.43	16.37	13.68	12.49	19.96
United Arab Emirates	3.79	3.75	3.50	4.24	4.50	4.80	3.42	5.19	6.83	10.13	13.93	9.03	12.96	13.99	12.19	13.07	10.90	16.17	7.23	17.27	16.29	28.69	23.49	24.90	40.28
West Bank <sup>e</sup>	0.33	1.00	0.00	1.00	0.00	1.00	3.17	0.13	0.70	0.14	1.50	1.96	1.33	1.67	0.87	0.54	7.08	2.57	2.84	3.24	2.98	1.59	3.33	6.50	8.94
Yemen	0.00	0.25	0.25	0.00	0.00	1.75	0.17	0.33	0.00	0.00	1.00	1.00	1.00	0.88	1.08	2.13	1.25	0.85	0.47	0.27	0.95	1.24	3.03	4.09	4.24
Africa	555.95	624.57	641.56	666.04	668.56	671.93	790.71	761.59	811.74	770.12	853.57	964.42	944.07	1,043.78	1,239.29	1,305.84	1,275.19	1,309.58	1,492.38	1,557.66	1,736.91	2,209.17	2,401.34	2,440.16	3,095.55
Algeria	2.46	1.62	3.86	6.16	5.75	7.04	4.19	9.69	5.81	10.83	14.66	15.25	25.55	34.98	39.36	40.47	40.71	49.30	53.90	83.04	81.15	118.94	166.29	140.35	149.83
Angola	0.00	0.00	0.33	0.25	0.00	0.00	0.00	0.00	0.00	0.33	0.77	0.17	0.13	0.00	0.13	0.56	0.67	0.10	0.57	0.33	0.20	2.35	0.67	1.40	1.40
Benin	1.42	2.50	3.09	5.57	4.11	1.83	3.33	6.13	6.81	5.63	10.62	9.35	11.04	16.31	12.77	20.57	15.96	12.17	18.14	24.84	13.94	23.90	24.91	26.96	29.79
Botswana	6.42	7.42	7.42	9.25	19.45	6.14	16.25	10.25	12.14	3.33	5.43	7.87	8.58	7.25	13.18	7.64	3.31	11.59	3.66	4.67	7.86	11.05	8.76	6.50	11.21
Burkina Faso	0.58	5.45	8.98	6.22	5.35	5.07	1.30	5.79	8.40	11.17	10.66	9.28	10.04	5.21	5.92	7.72	13.03	5.13	6.22	7.90	8.09	15.52	16.65	12.33	15.17
Burundi	0.92	0.00	0.13	1.50	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	1.00	0.83	0.00	0.00	0.50	0.20	1.50	1.12	0.74	2.47	2.41	2.43
Cabo Verde	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	1.00	0.47	0.10	0.00	0.00	0.13	0.87
Cameroon	11.82	15.20	8.42	14.59	12.28	8.33	18.56	21.44	20.00	29.20	27.90	21.65	29.50	20.02	18.82	19.71	14.07	16.99	28.30	26.52	25.62	32.05	40.29	30.52	56.51
Central African Republic	0.00	0.00	1.00	0.33	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.33	0.00	0.00	0.04
Chad	0.00	0.00	0.00	1.29	1.00	0.58	0.00	0.00	0.00	0.00	0.00	0.07	0.20	0.06	0.00	0.63	0.00	0.00	0.39	2.09	0.00	0.54	0.00	1.00	1.03
Comoros	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.78	0.13
Congo, Democratic Republic of the	0.00	1.17	0.33	0.20	0.00	0.00	0.17	1.33	0.00	0.00	0.00	0.90	2.46	1.22	0.86	2.86	1.96	1.60	1.84	6.30	4.57	7.20	4.13	4.80	4.90
Congo, Republic of the	3.20	0.00	1.20	0.00	0.00	0.25	1.17	1.20	0.14	0.00	1.88	3.43	0.17	1.47	0.71	0.81	0.87	1.58	0.87	1.10	3.21	3.36	0.85	1.06	1.78
Côte d'Ivoire	4.79	6.91	7.91	9.86	8.76	5.30	8.51	4.73	2.30	5.69	6.04	8.42	14.67	8.57	11.54	3.67	8.74	8.72	12.65	5.90	5.45	12.57	14.84	12.32	19.92
Djibouti	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.20	0.00	0.48	0.50	0.00	0.40
Egypt	59.75	69.78	81.95	76.67	90.58	88.91	70.53	66.65	64.84	55.41	62.89	93.17	109.64	139.65	165.06	209.22	179.20	194.72	224.07	259.10	267.12	382.90	382.57	488.23	693.85
Equatorial Guinea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eritrea	0.00	0.00	0.00	0.00	0.00	2.38	1.40	1.63	0.00	0.28	0.00	0.00	1.75	0.00	1.00	1.00	0.00	0.85	2.21	0.29	1.06	0.00	1.36	1.43	0.25
Eswatini	0.00	0.50	0.00	0.00	0.00	0.14	0.00	0.13	0.17	0.42	0.50	1.08	1.68	1.10	0.25	1.10	0.00	0.17	0.00	0.83	0.38	0.64	0.79	0.90	0.33
Ethiopia	24.54	31.58	22.19	28.87	25.87	27.32	34.77	45.73	47.32	44.93	58.41	55.62	61.85	77.73	83.94	83.02	96.50	83.40	98.20	80.88	129.22	143.96	184.70	136.42	227.11
Gabon	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.70	0.46	0.68	0.79	0.17	0.00	0.25	0.90	0.08	0.97	1.67	1.93	0.14	1.95	2.70	0.77	1.30	1.25
Gambia, The	1.83	3.44	1.64	0.50	0.50	0.63	1.50	2.92	4.35	1.11	1.25	0.50	1.17	0.58	0.13	1.86	0.13	0.00	0.00	0.25	0.00	0.22	1.25	2.08	1.66
Ghana	22.34	14.45	12.48	23.03	20.65	22.30	26.69	36.12	25.72	27.22	21.42	30.66	23.60	21.70	33.63	31.58	32.66	38.53	48.43	43.35	60.30	83.36	101.21	90.34	115.54
Guinea	0.00	0.00	2.00	0.00	0.00	2.83	1.00	2.50	1.00	0.00	0.33	1.45	0.33	0.43	0.63	0.10	0.17	0.67	0.90	0.00	0.06	0.58	0.10	0.37	0.64
Guinea-Bissau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.25	0.20	0.00	0.76	0.00	0.50	0.00	0.16	0.00
Kenya	49.24	54.09	48.98	43.40	40.00	58.34	62.28	45.36	46.00	62.26	67.47	64.36	51.86	49.40	77.93	87.61	84.84	63.06	65.53	79.93	100.21	119.83	132.70	124.75	162.16
Lesotho	0.25	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.20	0.33	0.75	0.17	1.67	0.64	0.40	0.52	1.00	0.57	0.29	0.79	1.25	0.63	0.00	2.20	6.13

Table SPBS-3

## S&amp;E articles in agricultural sciences, fractional count, by region, country, or economy: 1996–2020

(Number)

Region, country, or economy	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Liberia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.13	0.33	0.00	0.00	0.46	0.00	1.71	0.13	0.17
Libya	0.00	0.88	1.00	1.50	1.33	0.00	0.00	1.67	1.00	1.33	1.00	0.63	1.50	0.43	2.58	2.23	2.23	4.57	1.69	1.81	2.70	2.67	0.58	2.34	2.88
Madagascar	0.00	0.50	1.33	3.42	0.17	1.22	0.29	1.06	0.50	0.17	0.94	1.46	3.27	3.54	1.76	1.82	6.95	3.39	6.71	2.25	4.39	5.07	4.92	8.78	8.98
Malawi	3.00	6.25	7.99	4.83	5.87	8.28	4.88	3.52	2.90	3.23	5.93	8.55	5.73	3.05	5.85	8.34	13.85	6.03	5.39	10.03	8.66	11.34	10.94	14.60	15.79
Mali	4.32	1.75	3.19	3.52	2.08	1.33	2.21	4.25	3.67	3.94	5.22	6.55	2.80	4.66	1.72	5.58	8.45	1.53	7.42	4.67	6.96	10.86	5.82	4.31	6.46
Mauritania	0.00	0.33	0.00	0.20	0.49	0.25	0.00	0.70	0.00	0.25	1.00	0.00	0.14	0.00	0.29	2.03	1.03	0.59	0.75	0.00	0.00	0.22	0.14	0.25	0.00
Mauritius	1.00	1.50	2.17	6.50	6.63	3.17	1.75	2.31	1.75	4.79	1.70	1.80	1.67	3.08	4.46	2.42	3.86	5.79	4.60	4.08	4.36	4.00	2.78	6.99	5.95
Morocco	9.69	15.38	18.98	16.58	20.53	28.62	32.82	26.35	21.49	24.62	19.00	17.89	25.15	17.01	16.18	18.94	22.05	21.25	36.41	35.98	48.02	51.94	68.59	81.47	118.31
Mozambique	0.17	2.15	4.45	2.75	1.83	0.96	2.47	1.83	2.43	2.29	2.08	1.79	1.88	1.33	1.40	2.66	2.70	4.29	2.63	2.18	6.71	10.32	7.33	5.19	9.45
Namibia	0.00	1.58	2.50	1.33	0.08	1.08	1.08	1.50	1.67	0.00	0.83	0.73	0.75	1.51	2.68	3.10	0.48	2.23	0.25	1.00	1.96	4.45	1.95	9.48	6.91
Niger	5.46	7.32	8.18	5.99	6.95	3.50	4.78	3.10	1.45	2.82	2.30	2.49	2.67	3.86	13.26	4.64	2.52	1.81	3.03	10.71	5.62	4.55	5.22	5.77	5.40
Nigeria	165.63	159.91	151.01	184.27	142.83	152.91	196.32	191.96	174.20	170.91	196.48	221.07	190.10	163.89	209.68	235.70	234.11	226.14	279.89	276.31	319.65	398.11	484.03	415.07	520.58
Rwanda	1.42	2.62	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.20	2.58	1.75	2.23	3.71	4.73	6.31	4.52	3.64	10.86	11.45	6.92	9.19
São Tomé and Príncipe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00
Senegal	5.21	9.11	13.52	9.06	9.94	11.06	16.48	12.65	12.19	7.17	7.21	5.94	6.04	9.64	7.08	7.42	7.68	8.00	7.76	10.39	7.98	10.17	11.17	8.39	14.01
Seychelles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	1.25	0.00	2.08	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.00
Sierra Leone	0.83	1.50	1.50	0.70	0.25	0.00	0.25	1.00	0.58	0.00	1.00	2.25	0.00	0.83	0.50	0.42	0.29	0.00	0.00	1.81	0.17	1.80	0.92	2.37	2.34
Somalia	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.75	0.00	0.00	0.15	0.06	0.10	0.50	0.33	0.07	0.00	0.89	0.05
South Africa	104.53	123.52	134.17	130.37	160.82	139.29	183.84	160.11	248.78	174.97	201.33	207.33	185.41	237.21	279.36	220.53	238.06	302.89	304.05	315.05	344.74	423.14	411.86	476.31	540.92
South Sudan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.92
Sudan	7.77	15.85	20.33	15.52	11.50	15.69	16.55	19.14	16.87	13.92	11.92	22.36	15.93	18.98	24.97	34.48	27.47	20.55	19.79	18.16	17.83	20.68	18.88	21.78	22.77
Tanzania	13.05	16.48	24.73	11.69	13.29	12.30	14.60	16.31	19.20	24.71	31.16	45.46	18.54	24.69	21.82	27.92	27.11	27.64	42.82	42.00	37.93	40.92	42.86	34.84	51.60
Togo	0.50	1.00	1.29	0.42	0.44	0.25	0.50	2.63	2.40	2.91	4.37	1.13	0.75	1.10	3.01	1.64	3.97	2.89	2.49	0.38	2.06	2.95	1.78	4.64	4.84
Tunisia	8.93	5.90	9.82	7.50	15.78	12.53	21.49	18.18	23.58	30.62	28.56	59.38	91.75	125.06	140.39	147.09	126.94	122.87	133.93	121.63	136.13	151.20	133.93	168.20	165.35
Uganda	6.25	5.55	8.01	6.42	4.91	5.04	10.10	8.84	11.91	10.89	11.95	6.34	12.93	17.50	14.37	31.96	20.73	24.45	20.52	31.18	36.13	34.58	43.66	36.48	37.22
Zambia	3.63	5.08	7.01	3.98	2.37	8.33	3.75	2.58	5.93	5.71	5.27	5.23	3.13	3.43	4.76	3.36	7.11	5.17	2.70	6.76	5.43	9.82	10.08	5.73	12.08
Zimbabwe	24.01	26.33	7.50	21.57	25.67	27.22	24.71	19.60	13.43	25.07	21.11	22.47	15.21	11.82	13.13	20.40	18.33	20.63	33.01	25.04	21.22	35.11	34.58	29.95	29.05
Asia	3,002.07	3,137.15	3,247.83	3,656.66	3,995.40	3,978.29	4,267.60	4,513.95	5,135.04	6,031.26	6,435.84	7,920.44	8,968.85	9,466.11	10,422.76	11,295.99	12,253.83	14,534.66	15,437.97	16,250.71	18,018.43	19,895.92	21,953.75	24,526.59	27,899.77
Afghanistan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.07	0.58	1.96	0.20	1.50	0.08	0.29	1.67	3.08	3.68	9.83	5.02
Bangladesh	43.05	42.38	29.11	36.71	30.20	34.20	25.21	19.23	25.90	31.76	21.91	31.81	28.31	31.08	40.24	39.55	43.79	76.48	87.70	68.23	89.76	80.38	106.98	110.19	169.05
Bhutan	0.00	0.67	0.10	0.63	0.25	1.00	1.00	1.53	0.81	0.58	0.60	0.00	0.13	3.00	1.29	1.38	1.50	1.74	3.23	2.33	4.14	2.49	4.25	0.08	2.50
Brunei	0.00	0.33	1.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	0.00	0.00	1.63	0.00	0.00	1.50	0.00	4.67	5.44	0.95	5.30	4.20	5.00
Burma	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.13	0.40	0.17	1.13	2.94	0.85	0.30	0.30	0.29	1.85	1.53	0.01	1.90	1.13	1.32	4.24	6.57	8.56
Cambodia	0.00	1.54	2.00	2.63	3.29	1.33	10.45	8.79	3.28	6.86	7.20	4.16	5.43	4.20	5.28	3.60	3.31	4.72	4.89	5.53	4.87	6.13	7.58	5.56	7.49
China	235.43	254.87	306.22	432.76	450.67	678.11	789.79	965.76	1,244.02	2,153.17	2,364.65	2,914.09	3,117.23	3,420.47	3,867.69	4,609.63	5,155.38	7,206.47	7,716.54	8,472.85	9,844.71	11,125.10	12,859.03	15,335.87	17,732.94
India	1,453.76	1,534.16	1,602.51	1,669.70	1,712.57	1,715.77	1,631.25	1,719.63	1,696.81	1,706.74	1,885.29	2,241.85	2,827.10	2,879.47	3,101.63	2,923.47	3,329.26	3,191.48	3,614.80	3,722.08	3,604.04	3,767.55	3,549.42	3,095.75	3,097.71

Table SPBS-3

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(Number)

Region, country, or economy	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Indonesia	13.21	30.12	21.54	26.11	32.78	18.86	15.46	11.21	31.26	29.52	13.39	17.89	22.45	38.95	98.73	107.38	129.87	125.87	168.35	235.56	276.82	382.78	574.00	800.60	933.84
Japan	910.87	877.59	859.01	1,032.66	1,143.09	973.04	1,130.45	1,076.65	1,307.18	1,181.89	1,116.52	1,101.65	1,224.06	1,213.89	1,136.12	1,142.67	1,112.53	1,119.56	1,087.99	932.81	976.59	964.78	1,021.47	1,026.66	1,102.30
Kazakhstan	2.40	0.14	0.14	0.67	0.00	0.53	0.75	0.00	2.34	5.17	1.10	1.11	1.37	0.57	6.39	5.12	4.54	9.31	7.44	3.90	14.03	15.39	24.88	37.51	39.54
Kyrgyzstan	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.10	0.50	1.40	0.00	1.50	0.00	0.58	0.67	0.58	2.05	1.20	1.44	1.84	3.32	4.18	0.45	3.92	2.35
Laos	0.10	1.50	0.40	0.25	2.43	0.00	1.90	4.22	5.37	0.85	5.39	4.23	7.17	5.19	4.45	4.61	12.77	7.73	3.52	6.12	10.66	10.00	11.73	5.93	4.84
Malaysia	49.96	32.80	43.96	48.68	64.80	44.31	51.88	49.91	57.80	53.23	72.14	107.48	119.37	195.48	226.12	321.60	340.69	381.88	402.41	427.70	514.89	584.30	601.29	545.28	705.10
Maldives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mongolia	0.38	0.45	1.10	0.17	0.25	0.00	0.00	0.17	0.33	0.29	0.68	1.00	0.47	1.81	2.12	2.48	1.35	2.51	2.18	3.14	2.74	3.65	1.16	2.53	5.47
Nepal	4.33	5.63	4.70	4.67	5.05	10.51	3.98	5.21	5.25	6.82	8.19	9.28	8.53	10.30	4.44	2.58	4.29	11.43	8.78	8.83	9.71	9.03	23.30	19.32	31.06
North Korea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.62	0.00	0.00	0.62	0.00	0.07	0.20	0.00	0.25	1.20	1.92	0.83
Pakistan	38.09	47.30	51.98	46.68	44.88	35.54	37.56	48.76	53.12	56.18	81.99	172.22	151.08	139.96	187.67	219.64	225.97	326.23	261.73	278.98	346.55	431.87	519.28	576.22	621.58
Papua New Guinea	2.12	3.21	7.33	2.33	5.42	1.75	0.50	0.50	0.17	0.00	2.37	0.50	2.63	1.33	3.16	4.17	2.11	0.50	2.92	1.28	2.19	7.60	4.20	3.20	1.40
Philippines	39.60	49.34	31.09	37.27	39.90	26.76	41.54	19.67	38.57	37.15	32.29	35.20	37.03	43.83	29.47	31.74	38.49	58.28	39.44	50.33	51.95	63.86	65.02	84.45	100.21
Singapore	8.17	12.67	7.90	26.50	7.30	10.88	17.31	16.59	24.20	25.35	42.36	32.45	31.02	25.87	30.36	27.67	30.28	33.04	40.71	42.37	41.83	60.04	57.08	58.19	75.11
South Korea	45.26	72.11	72.49	90.08	180.79	171.16	218.96	248.01	268.62	332.24	313.48	619.46	748.82	755.96	888.88	878.99	968.73	1,117.40	1,213.48	1,161.64	1,264.89	1,442.84	1,472.15	1,625.41	1,857.03
Sri Lanka	11.88	10.08	22.22	18.06	24.54	21.21	17.83	28.88	23.91	21.50	25.85	31.43	28.73	24.70	15.87	33.25	24.94	31.00	31.17	31.81	37.92	36.38	45.67	54.25	57.63
Taiwan	94.45	106.99	130.01	114.56	155.93	153.44	187.36	184.71	202.39	225.84	270.48	359.02	350.85	387.34	442.83	449.09	457.19	411.34	367.63	346.91	310.65	267.66	266.77	337.82	363.34
Tajikistan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.75	0.90	1.52	1.15	0.25	0.05	0.18	1.88
Thailand	30.69	26.33	36.93	50.99	78.67	68.97	70.60	83.98	114.39	123.38	143.49	207.04	224.65	248.39	286.43	441.92	304.77	350.97	332.60	394.53	532.38	552.77	621.08	622.20	735.46
Timor-Leste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.50	1.30	0.78	0.94	0.71	0.00	0.14	0.67	0.33	0.00
Turkmenistan	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.29	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00
Uzbekistan	3.00	1.50	0.00	1.00	1.70	1.17	3.08	3.13	2.62	4.14	2.45	5.74	2.58	6.13	8.84	6.84	4.09	3.06	2.64	3.96	7.55	3.78	4.80	10.31	9.05
Vietnam	15.33	25.44	16.06	11.66	10.86	9.75	10.16	17.17	25.64	26.74	21.61	16.41	28.50	26.61	31.58	35.30	51.14	56.39	34.37	38.70	56.84	67.37	97.00	141.97	223.49
Australia and Oceania	1,119.11	1,157.96	1,046.42	1,086.43	1,336.02	1,047.83	1,242.97	1,154.52	1,101.85	1,117.03	1,211.73	1,232.59	1,316.45	1,197.28	1,289.35	1,264.64	1,289.32	1,392.41	1,565.39	1,475.29	1,560.66	1,547.73	1,618.22	1,732.14	1,774.95
Australia	801.20	819.85	721.50	726.32	1,002.30	754.73	941.70	857.55	803.96	811.77	913.96	930.64	960.37	915.33	996.26	960.90	960.82	1,044.45	1,148.20	1,118.79	1,143.60	1,166.25	1,232.39	1,266.96	1,247.62
Cook Islands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiji	0.25	2.96	1.50	1.38	1.00	0.85	0.00	0.69	0.00	2.00	1.95	0.50	2.28	1.00	0.77	1.20	0.92	0.00	0.44	1.00	5.75	3.33	9.30	5.74	9.19
Kiribati	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.43
Marshall Islands	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.08	0.08	0.00
Micronesia, Federated States of	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.28	0.00	0.43	0.47	0.08	0.00	0.33	0.00	0.11	0.13	0.00	0.00	0.00	0.00	0.00
Nauru	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Zealand	316.99	335.15	322.34	357.40	329.72	289.49	297.73	293.95	293.31	300.64	291.45	298.95	352.80	278.99	290.49	301.49	327.05	346.09	414.38	352.79	409.91	374.09	374.04	457.51	510.77
Niue	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Palau	0.50	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Samoa	0.17	0.00	0.83	1.00	2.00	1.75	3.20	1.61	4.00	2.00	3.75	2.50	0.00	0.00	0.33	0.29	0.00	0.00	1.17	2.10	0.00	2.36	1.77	1.00	6.40
Solomon Islands	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.25	0.25	0.00	0.00	0.00	0.00	0.33	0.75	0.00	0.09	0.00	0.17	0.13	0.00	0.17	0.00	0.85	0.08



Table SPBS-3

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(Number)

Region, country, or economy	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Tonga	0.00	0.00	0.25	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.33	0.63	0.00	0.04
Tuvalu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanuatu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.33	0.62	0.00	0.00	0.50	0.83	0.67	0.75	0.11	1.87	0.33	0.27	1.40	1.20	0.00	0.00	0.42
Unassigned	202.89	161.21	177.65	168.69	130.30	86.95	77.64	135.05	90.97	97.34	97.12	134.58	184.06	91.65	78.22	64.89	52.29	50.74	47.43	30.57	20.60	33.28	36.91	55.01	64.08

EU = European Union; UK = United Kingdom.

<sup>a</sup> The UK was a part of the EU for data purposes from 1973 to 2019.<sup>b</sup> Beginning in 2020, the UK was no longer a member of the EU.<sup>c</sup> Beginning in 2006, Serbia and Montenegro represented individual countries.<sup>d</sup> Serbia and Montenegro represented a single country for data purposes from 1992 to 2006.<sup>e</sup> West Bank and Gaza Strip are separate entities in this list but are grouped in the World Bank Lending Groups classification list. Here, the economic status of the group is applied to both individual regions.**Note(s):**

Article counts refer to publications from a selection of conference proceedings and peer-reviewed journals in S&E fields from Scopus. Articles are classified by their year of publication and are assigned to a region, country, or economy on the basis of the institutional address(es) of the author(s) listed in the article. Articles are credited on a fractional count basis (i.e., for articles produced by authors from different countries, each country receives fractional credit on the basis of the proportion of its participating authors). Data are not directly comparable to *Science and Engineering Indicators 2020*; see the Technical Appendix for information on data filters. The sum of the fractional count for regions, countries, and economies may not add to the world total because of rounding. Some publications have incomplete address information for coauthored publications in the Scopus database. The Unassigned category count is the sum of fractional counts for publications that cannot be assigned to a region, country, or economy.

**Source(s):**

National Center for Science and Engineering Statistics; Science-Metrix; Elsevier, Scopus abstract and citation database, accessed May 2021.

*Science and Engineering Indicators*