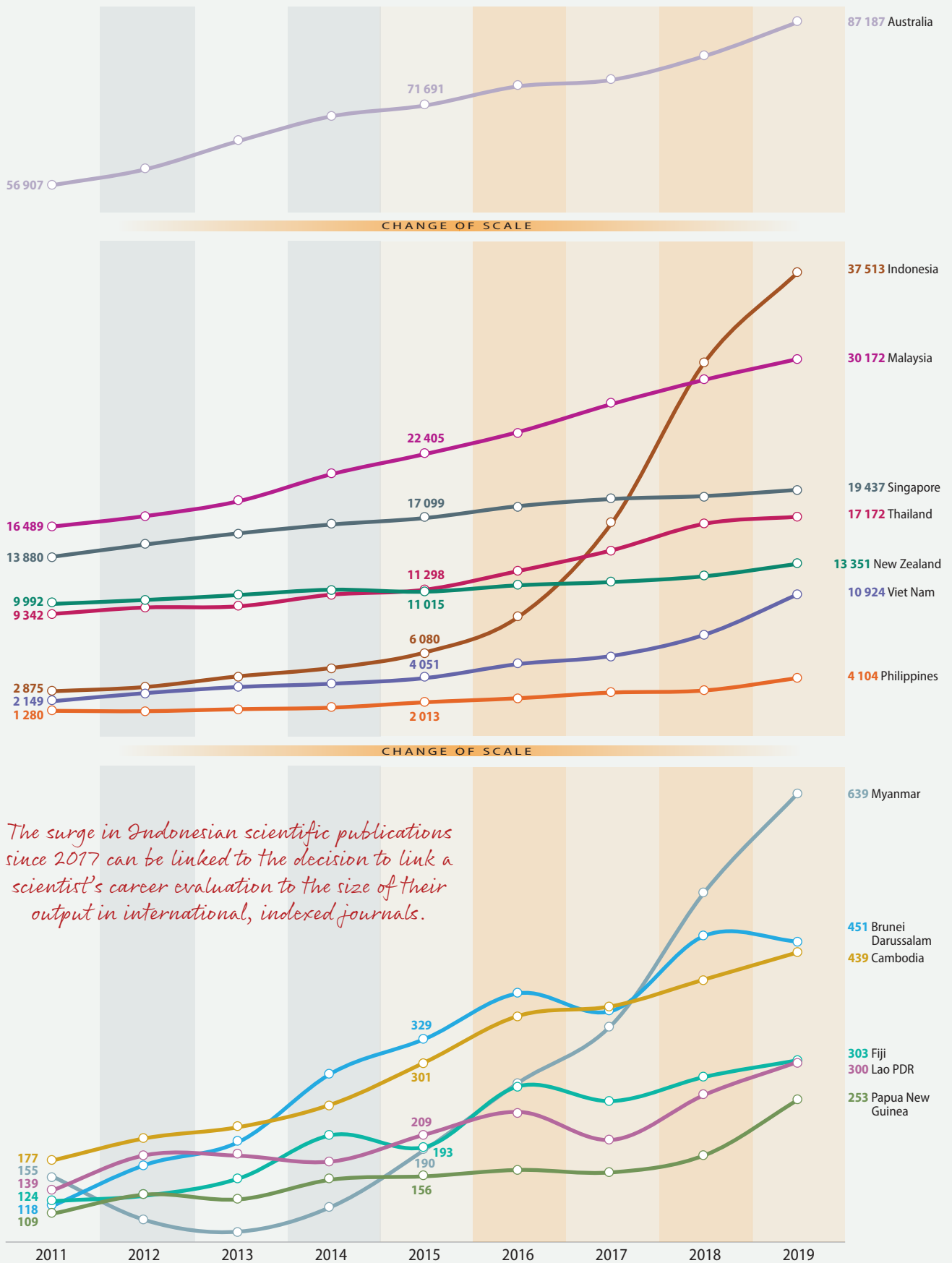




Figure 26.4: Trends in scientific publishing in Southeast Asia and Oceania

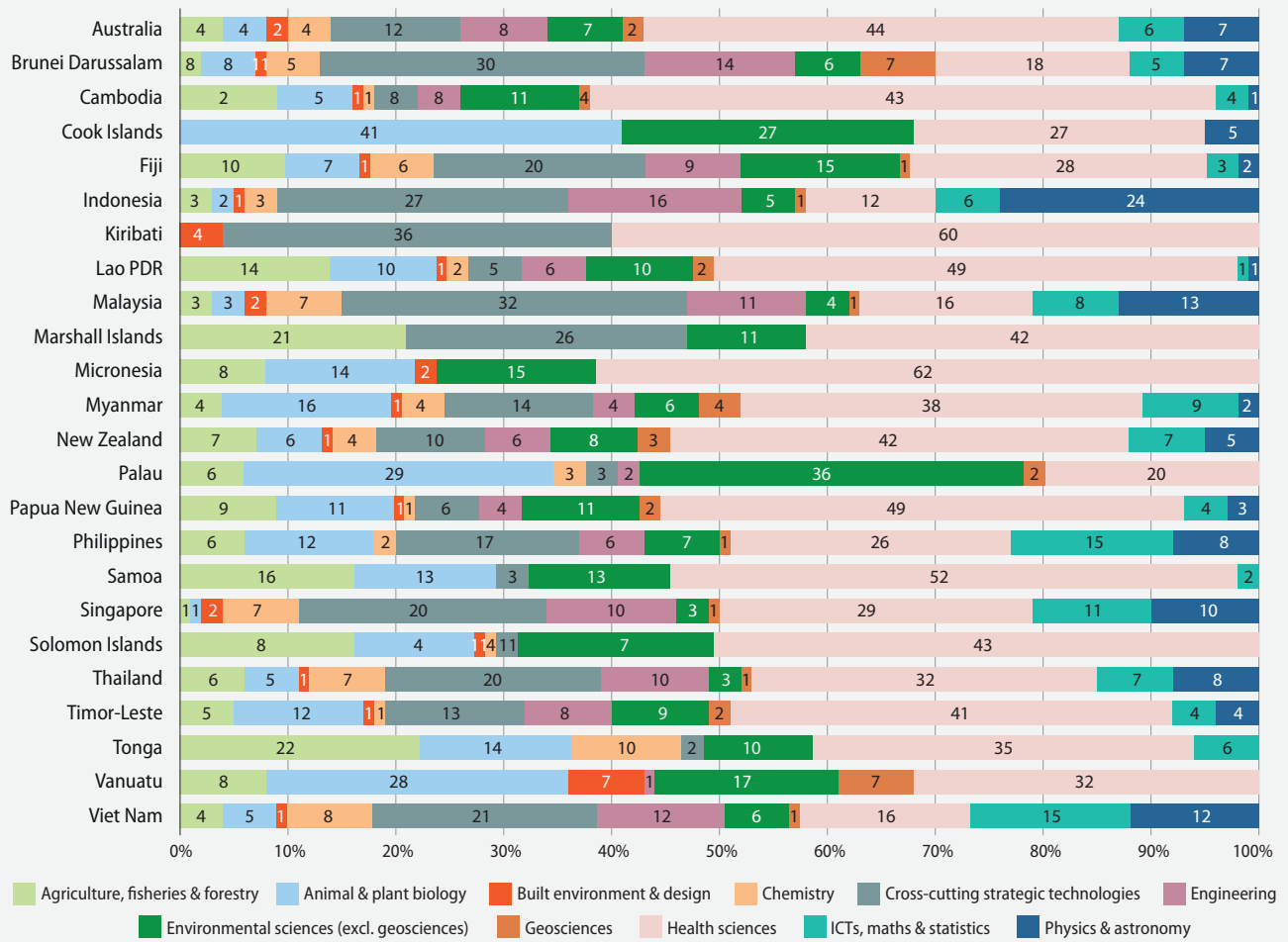
Volume of scientific publications in Southeast Asia and Oceania, 2011–2019



The surge in Indonesian scientific publications since 2017 can be linked to the decision to link a scientist's career evaluation to the size of their output in international, indexed journals.

Note: Nauru (14), Niue (10), the Marshall Islands (19) and Tuvalu (19) are not shown, having produced fewer than 20 publications during the period under study. For complete data for all countries, see the statistical annex.

Share of scientific publications in Southeast Asia and Oceania by broad field of science, 2017–2019 (%)

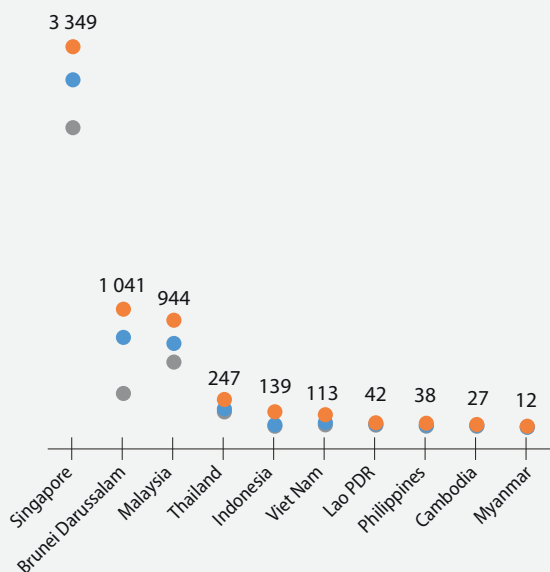


Note: Nauru, Niue and Tuvalu do not feature here, having produced fewer than 25 publications over 2017–2019.

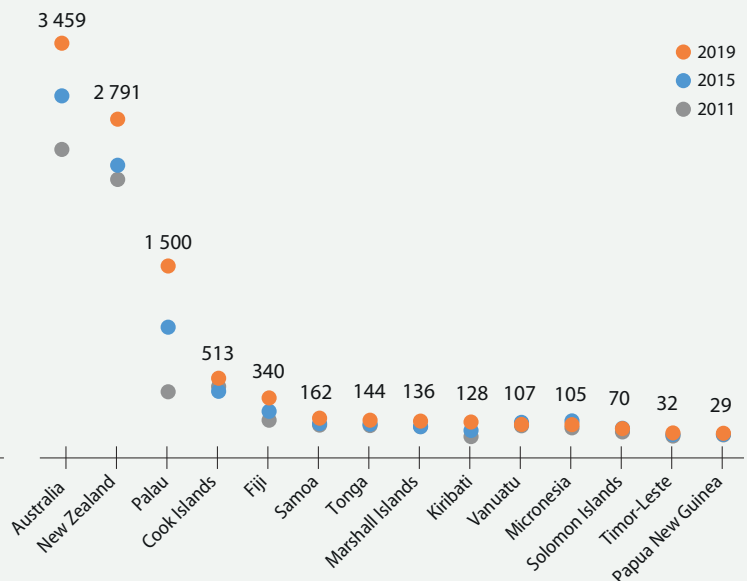
Scientific publications per million inhabitants in Southeast Asia and Oceania, 2011, 2015 and 2019

Data labels are for 2019

ASEAN member states



Oceania



Note: Nauru, Niue and Tuvalu do not feature here, having produced fewer than 20 publications over 2011–2019.


Figure 26.4: Trends in scientific publishing in Southeast Asia and Oceania... continued

The average of relative citations during 2014–2016 fell below the Q20 average of 7.02 for six countries: Thailand, Malaysia, Indonesia, Vanuatu, Timor-Leste and Samoa.

Seven out of ten publications during 2017–2019 involved international co-authorship for 19 countries. Only Indonesia (78%) recorded international collaboration below the Q20 average of 25%.

How has output on SDG-related topics evolved since 2012?



Traditional topics in the fields of agriculture and tropical diseases remain priorities but research related to climate, pollution and ecosystems is growing in the region. The Predator-Free 2050 New Zealand initiative is backed by research on invasive alien species that amounts to nearly seven times the average publication intensity. Australia, Fiji, Indonesia, the Philippines and Viet Nam all publish over four times as much as would be expected on the local impact of climate-related hazards and disasters. Pacific Small Island Developing States (SIDS) are conspicuous by their absence from these topics.

Brunei Darussalam, Fiji, Malaysia, Thailand and Singapore are specializing in sustainable energy topics such as photovoltaics, wind or hydrogen energy and smart-grid technologies, with rapid growth observed in other countries, including Viet Nam.

Researchers in Indonesia, Malaysia, the Philippines and Thailand are now publishing 5–9 times more than would be expected on sustainable alternatives to plastic, with Indonesia's output swelling from 6 (2012–2015) to 155 (2016–2019) publications.

As host of the regional University of the South Pacific, Fiji dominates the research output of Pacific SIDS. Despite low numbers, Pacific publishing reflects the national priorities of sustainable use of terrestrial ecosystems and tropical communicable diseases, with signs of growing attention being paid to sustainable agriculture in Papua New Guinea and Vanuatu.

For details, see chapter 2

Top five partners for scientific co-authorship in Southeast Asia and Oceania, 2017–2019 (number of papers)

	1st collaborator(s)	2nd collaborator(s)	3rd collaborator(s)	4th collaborator(s)	5th collaborator(s)
Australia	USA (40 958)	China (36 750)	UK (30 121)	Germany (15 730)	Canada (13 185)
Brunei Darussalam	Malaysia (220)	China (160)	UK (152)	Australia (142)	Indonesia (111)
Cambodia	USA (345)	France/Thailand (248)		UK (246)	Australia (222)
Cook Islands	New Zealand (16)	USA (13)	France (11)	Australia (9)	UK (6)
Fiji	Australia (329)	USA (150)	UK (111)	India (82)	New Zealand (74)
Indonesia	Malaysia (3 633)	Japan (3 548)	Australia (1 805)	USA (1 743)	UK (1 395)
Kiribati	Fiji (10)	USA (8)	Australia (7)	UK (6)	Switzerland (4)
Lao PDR	Thailand (240)	UK (163)	USA (160)	Australia (145)	Viet Nam (124)
Malaysia	UK (4 807)	India (3 851)	Australia (3 741)	USA (3 716)	Indonesia (3 633)
Marshall Islands	USA (6)	Micronesia (5)	Australia/Japan/Palau (3)		
Micronesia	USA (54)	Australia (32)	UK (26)	Canada/France/Germany/India/Japan/Rep. Korea/Saudi Arabia/Spain/Sweden (22)	
Myanmar	Japan (321)	China (291)	Thailand/USA (236)		UK (169)
New Zealand	USA (7 149)	Australia (7 087)	UK (5 605)	China (3 643)	Germany (3 017)
Niue	Australia (6)	Samoa/Vanuatu (4)		Solomon Islands/UK (3)	
Palau	USA (40)	Australia (13)	Japan/UK (12)		New Zealand (7)
Papua New Guinea	Australia (313)	USA (157)	UK (96)	France (70)	India (54)
Philippines	USA (1 503)	Japan (961)	China (723)	UK (693)	Australia (658)
Samoa	Australia (45)	USA (32)	New Zealand (24)	Fiji (17)	UK (11)
Singapore	China (15 327)	USA (10 129)	UK (5 486)	Australia (4 257)	Germany (2 578)
Solomon Islands	Australia (108)	UK (41)	USA (39)	Fiji (19)	France (17)
Thailand	USA (5 742)	Japan (3 704)	UK (3 149)	China (2 577)	Australia (1 980)
Timor-Leste	Australia (59)	Indonesia (19)	Portugal (17)	UK (16)	USA (13)
Tonga	Australia (27)	New Zealand (21)	Fiji (12)	USA (11)	France (8)
Tuvalu	France/USA (4)		Brazil/Fiji/Tonga/UK (3)		
Vanuatu	USA (34)	Australia (33)	France (21)	Canada (16)	Japan/UK (11)
Viet Nam	USA (2 462)	Japan (2 327)	Korea, Rep. (2 302)	Australia (1 881)	China (1 841)

Source: Scopus (excluding Arts, Humanities and Social Sciences); data treatment by Science-Metrix