

*[Earth's Future]*

Supporting Information for

**[Appraising the Water-Energy-Food Nexus from a Sustainable Development Perspective: A Maturing Paradigm?]**

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Table S2.5 Details of funding sources and organizations supporting African WEF research. A total of 85 funding sources representing 49 different funding organizations were identified.

Table S4.3 Author keyword analysis. Keywords were analyzed inductively, with research themes emerging through the clustering of connected keywords. In total, 246 keywords associated with (n=38) publications were analyzed.

Table S4.5. Details of funding sources and organizations supporting Asian WEF research. A total of 73 funding sources representing 57 different organizations were identified.

Table S6.1 Development status and characteristics of countries highlighted in Global South nexus research

## **Introduction**

This supporting information contains details concerning the literature review process (Text S1 and Tables S1.1 to S1.5) associated with Section 2 Materials and Methods. Plus, extended bibliometric results for each regional assessment of the literature underpinning Section 3 Trends in African, Asian, and Latin American and Caribbean nexus literature. That supporting information is structured as follows: (Text S2 African WEF, and Tables S2.1 to S2.5 and Figures S2.1 to S2.6); (Text S3 Latin America and the Caribbean WEF, and Tables S3.1 to S3.5 and Figures S3.1 to S3.6) and (Text S4 Asian WEF, and Tables S4.1 to S4.5 and Figures S4.1 to S4.6).

### Text S1. Nexus literature search strategy and selection

Searches were conducted with the purpose of focusing on nexus discourse related to Global South regions. Literature searches employed largescale abstract and citation databases, namely, Scopus and Web of Science (core collection). Table S1.1 and Table S1.2, outline the search strategies for each of these databases respectively, including search terms, search scope and numbers of records retrieved for per search. Following these searches, for each database, downloaded csv files for each region were combined and duplicates removed. These regional files derived from each database were then combined and the process repeated so that further excess duplicates identified in each database could be removed (Table S1.3). These fully duplicate removed files were then screened (Title and Abstract) to further remove articles not considered relevant and produce a final included sample of documents. The screening process used the inclusion/exclusion criteria outlined in Table S1.4. Applying these criteria to the combined and duplicate removed regional files resulted in a total of 138 records across the three regions from an original 236 records (Table S1.5).

**Table S1.1** Scopus database search strategy

Search date (10.05.2021)				
Region	Keywords	Search Strategy	Hits	Total
Africa	"water energy food" AND "nexus" AND "Africa"	Title-Abs-Keywords, All Years, All Publication Types	39	123
	"food water energy" AND "nexus" AND "Africa"		6	
	"food" AND "water" AND "energy" AND "nexus" AND "Africa"		78	
Latin America & Caribbean	"water energy food" AND "nexus" AND "Latin America" / "South America"	Title-Abs-Keywords, All Years, All Publication Types	6, 5	25
	"food water energy" AND "nexus" AND "Latin America" / "South America"		0, 1	
	"food" AND "water" AND "energy" AND "nexus" AND "Latin America" / "South America"		8, 5	
Asia	"water energy food" AND "nexus" AND "Asia"	Title-Abs-Keywords, All Years, All Publication Types	45	131
	"food water energy" AND "nexus" AND "Asia"		5	

	"food" AND "water" AND "energy" AND "nexus" AND "Asia"		81	
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**Table S1.2** Web of Science database search strategy

Search date (10.05.2021)				
Region	Keywords	Search Strategy	Hits	Total
Africa	"water energy food" AND "nexus" AND "Africa"	Topic, All Years, All Publication Types, WoS Core Collection	38	131
	"food water energy" AND "nexus" AND "Africa"		7	
	"food" AND "water" AND "energy" AND "nexus" AND "Africa"		86	
Latin America & Caribbean	"water energy food" AND "nexus" AND "Latin America" / "South America"	Topic, All Years, All Publication Types, WoS Core Collection	6, 5	27
	"food water energy" AND "nexus" AND "Latin America" / "South America"		1, 0	
	"food" AND "water" AND "energy" AND "nexus" AND "Latin America" / "South America"		10, 5	
Asia	"water energy food" AND "nexus" AND "Asia"	Topic, All Years, All Publication Types, All Databases	42	141
	"food water energy" AND "nexus" AND "Asia"		6	
	"food" AND "water" AND "energy" AND "nexus" AND "Asia"		93	

**Table S1.3** Post-duplicate article sample size across databases and regions

Region	Scopus (after duplicates)	WoS (after duplicates)	Combined Total (after duplicates)
Africa	78	84	104
Asia	81	92	115
Latin America	13	15	16
<b>Total</b>	<b>182</b>	<b>191</b>	<b>236</b>

**Table S1.4** Final regional and total publication sample size

<b>Region</b>	<b>Cross-database Total (pre-screening)</b>	<b>Total (post-screening)</b>
Africa	104	82
Asia	115	47
Latin America	16	9
<b>Total</b>	<b>236</b>	<b>138</b>

**Table S1.5** *[This file has been uploaded separately]*

## **Text S2 African WEF: Extended bibliometric results**

Research on WEF in Africa has been growing over the last 10 years, with the number of articles and reviews increasing, especially since 2016: most (56/71 or 78.87%) have been published within the last 5 years (Table S2.1, Figure S2.1). Peer-reviewed research outputs have been published in a wide variety of journals, though journals with the greatest frequency of publications are interdisciplinary environmental outlets, namely: Sustainability; Frontiers in Environmental Science; Science of the Total Environment; Renewable & Sustainable Energy Reviews; and Water (Table S2.2). Based on a thematic analysis of 385 author keywords, WEF research in Africa spans 17 focal domains, covering conceptualization (nexus characterization; tools, methods and approaches; and nexus thinking) and application (resource scarcity and security; food, water and energy sectors; people; governance; adaptation, resilience, vulnerability, and mitigation; climate change; sustainable development; land; ecosystems; environmental impacts; economics, finance and development) across multiple geographies (Table S2.3).

The geographical scope of WEF nexus research can be split, roughly, between those that adopt a continental-regional focus and those that are focused on the country-sub-country scale (Figure S2.2). At the continental-regional scale, research tends to focus on the continental, SSA, MENA or Southern Africa geographies. Meanwhile, at the country-sub-country scale, research in South Africa and then Tanzania dominates. Although researchers are located at institutions in 43 countries across the world, in the Global North and Global South, most are based in institutions located in the UK; USA and South Africa, meaning there is an under-representation of African-based researchers and research institutions (Figure S2.3).

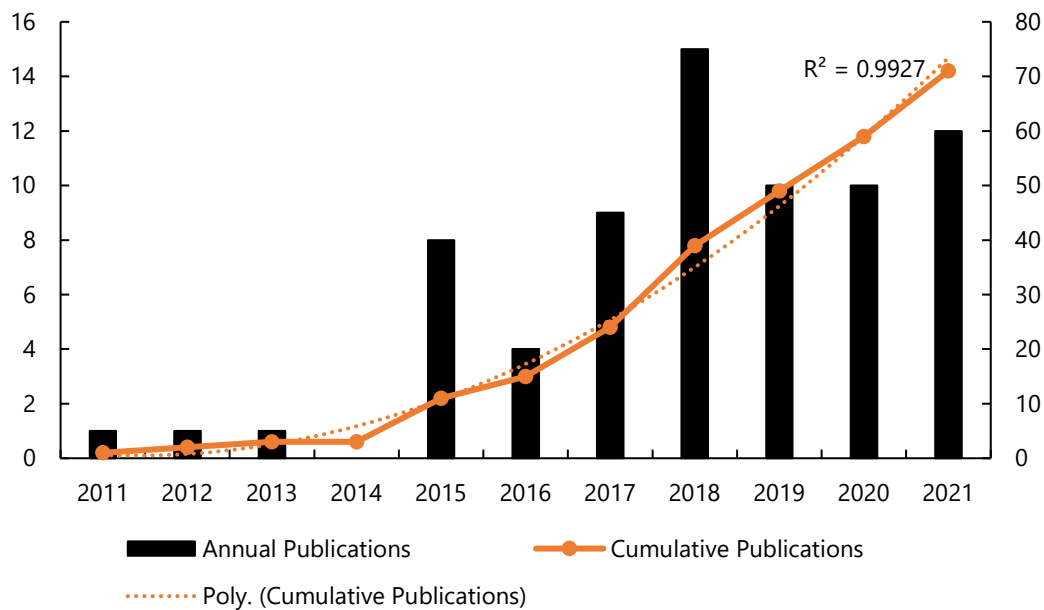
Research publications are frequently multi-institutional, averaging  $3.26 \pm 2.42$  institutions per publication, but range between 1 to 12 institutions. Most publications are authored by researchers based at institutions purely from the Global North (35.48%), or collaborations between Global North and Global South institutions (33.87%), fewer publications are authored solely by researchers based at institutions in the Global South (30.64%) (Figure S2.4). Global North institutions dominate the institutional landscape while South Africa accounts for much of the African institutional presence.

Most institutions conducting research are from the university sector, with state-related and independent think tanks and research institutes also making an important contribution (Figure S2.55). That said, Government entities fund most WEF research (40%) followed by the university sector (37%), while smaller but important contributions are made by the third sector, and international organizations and development banks (Figure S2.6).

Research funding sources mirror the institutional locations of authors, with most funding derived from UK (24.71%), South African (21.18%) and US sources (16.47%) (Table S2.4). Most money is channeled from Global North organizations, with significant funding contributors to African WEF research including UK research councils (especially ESRC and NERC) and the UK Department for International Development (DFID), the Water Research Commission in South Africa, and several US sources (including Bill and Melinda Gates Foundation, Grantham Foundation for the Protection of the Environment, and USAID), as well as several others (Table S2.5).

**Table S2.1** Document type and number

Document Type	Number of Documents	(%) by document Type
Article	57	69.51
Book Chapter & Book	5	6.10
Conference Proceedings, Conference Papers	6	7.32
Reviews	14	17.07
<b>Total</b>	<b>82</b>	<b>100.00</b>



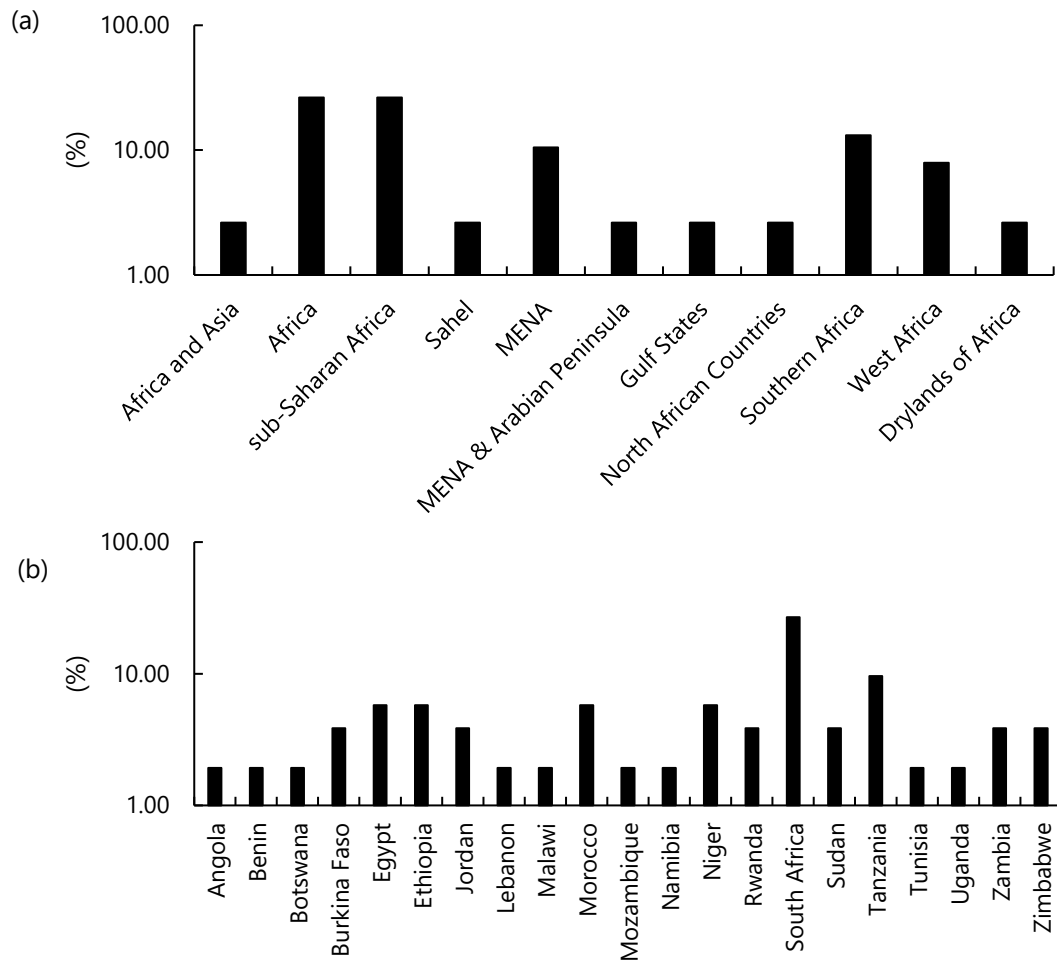
**Figure S2.1** Publication frequency and trend analysis of African-related WEF peer-reviewed literature. The graph shows both the annual and cumulative number of publications for the period 2011 to 2021, based on (n=71) peer-reviewed articles. Polynomial trend best fits ( $R^2 = 0.99$ ) the growth in publications.

**Table S2.2** Top 5 journal outlets for African WEF-related articles based on n=71 research articles and reviews. In total, 47 different journal periodicals were identified.

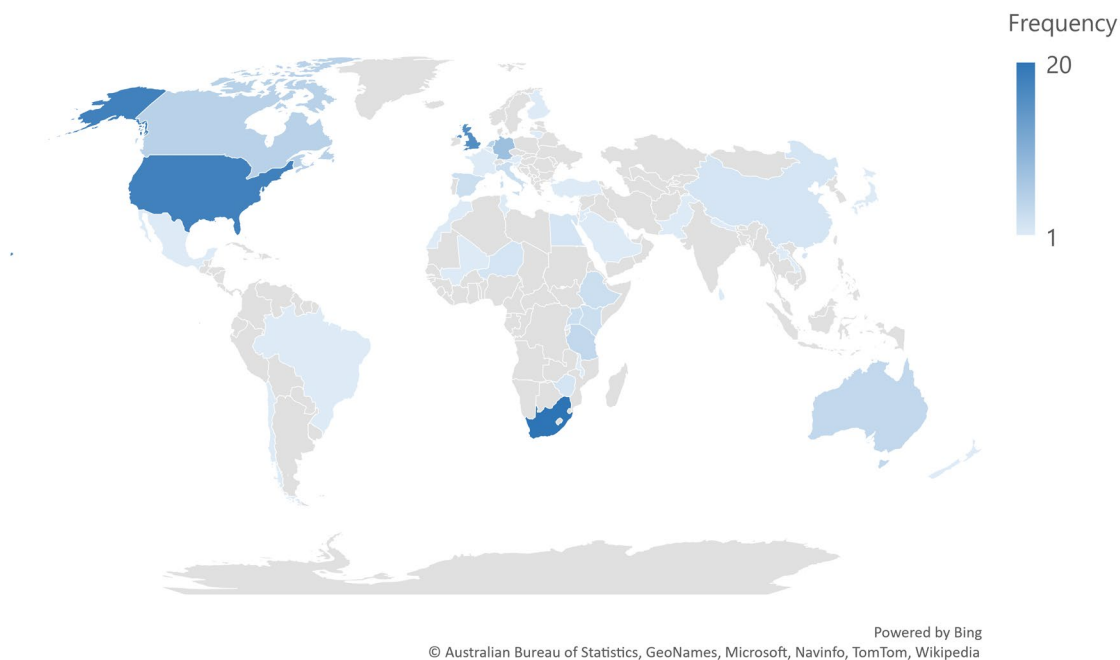
<b>Journal name</b>	<b>No. of Published Articles</b>	<b>Scope of journal</b> (described on the journal's website)
<i>Sustainability</i>	6	International and cross-disciplinary scholarly, open access journal of environmental, cultural, economic, and social sustainability of human beings, which provides an advanced forum for studies related to sustainability and sustainable development.
<i>Frontiers in Environmental Science</i>	5	Publishes research at the cutting edge of knowledge of our natural world and its various intersections with society. It bridges between the identification and measurement of change, comprehension of the processes responsible, and the measures needed to reduce their impact. Its aim is to assist the formulation of policies, by offering sound scientific evidence on environmental science, that will lead to a more inhabitable and sustainable world for the generations to come.
<i>Science of the Total Environment</i>	4	International multi-disciplinary journal for publication of novel, hypothesis-driven and high-impact research on the total environment, which interfaces the atmosphere, lithosphere, hydrosphere, biosphere, and anthroposphere.
<i>Renewable &amp; Sustainable Energy Reviews</i>	3	Communicate the most interesting and relevant critical thinking in renewable and sustainable energy in order to bring together the research community, the private sector and policy and decision makers. The aim of the journal is to share problems, solutions, novel ideas and technologies to support the transition to a low carbon future and achieve our global emissions targets as established by the United Nations Framework Convention on Climate Change.
<i>Water</i>	3	International and interdisciplinary open-access journal covering all aspects of water, including water science, technology, management, and governance

**Table S2.3** [This file has been uploaded separately]

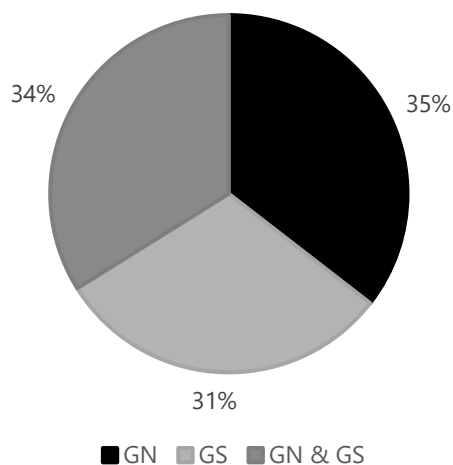




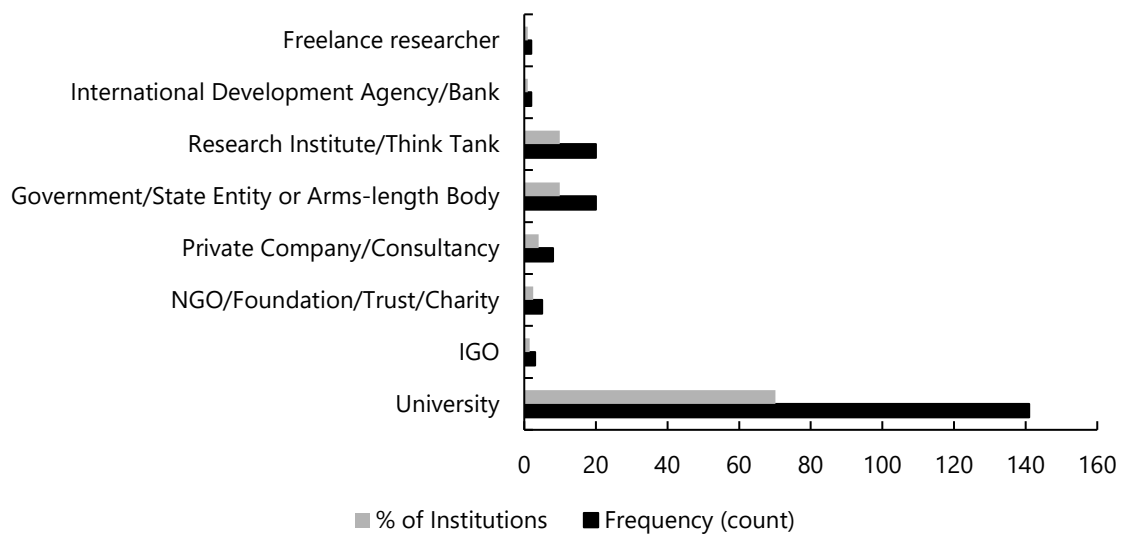
**Figure S2.2.** Geographical scale and focus of African WEF studies. Locations identified from (n=82) article abstracts. **(a)** continental-regional focus of WEF research. **(b)** Country/sub-country focus of WEF research. Overall, 42.22% of total identified geographical foci of concern were at the continental-regional scale, whilst 57.78% were at the country/sub-country scale. For **(a)** n=38 continental-regional geographical occurrences in publication abstracts were identified (% calculations for these figures are based on using 38 as the denominator). For **(b)** n=52 country-level geographical occurrences in publication abstracts were identified (% calculations for these figures are based on using 52 as the denominator). For each graph, the Y-axis is presented on a logarithmic scale.



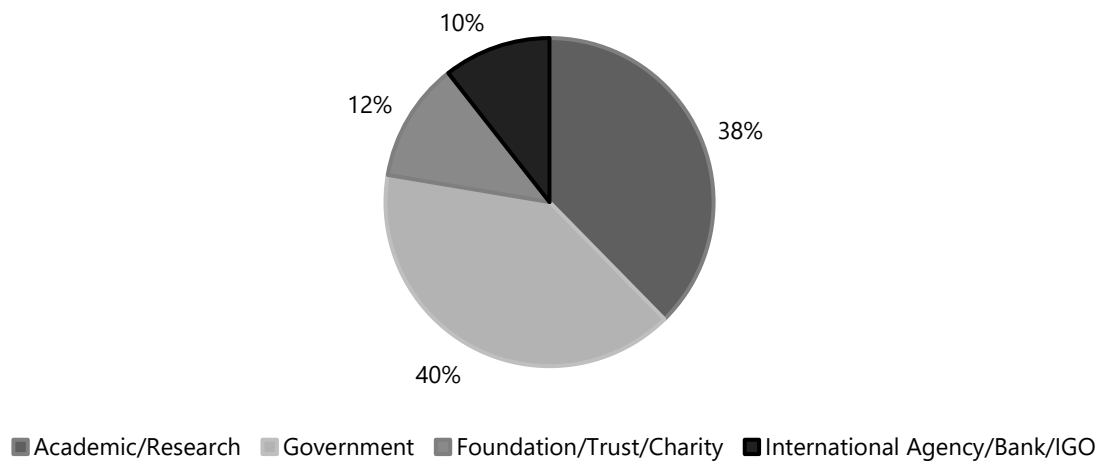
**Figure S2.3** Geographical locations of authors and associated country-level frequency based on institutional affiliation. In total, 43 countries were identified. In cases where authors on the same publication were from either the same or different institution within the same country, that country was only counted once.



**Figure S2.4** Geographical composition of publications based on author institutional affiliations. Numbers refer to percentages. GN (Global North); GS (Global South); GN & GS (Global North & Global South).



**Figure S2.5** Institutional categorization of authors. This is based on their identified affiliation translated into a general sector description.



**Figure S2.6.** Funding of WEF research by sector according to publication funding information from (n=36) publications.

**Table S2.4** Countries associated with the funding sources identified from (n=62) articles. Percentages in bold refer to countries that are the most common funding sources for research on African WEF, namely: UK; South Africa and USA.

Countries funding WEF research	Frequency (counts)	%
<i>Europe</i>		
Austria	1	1.18
France	4	4.71
Germany	1	1.18
Netherlands	1	1.18
Sweden	3	3.53
UK	21	<b>24.71</b>
European Union	2	2.35
<i>North America</i>		
USA	14	<b>16.47</b>
Canada	1	1.18
<i>Africa</i>		
Côte d'Ivoire	1	1.18
Egypt	1	1.18
Iraq	1	1.18
Saudi Arabia	1	1.18
South Africa	18	<b>21.18</b>
Tanzania	1	1.18
<i>Latin America</i>		
Mexico	1	1.18
Brazil	3	3.53
<i>Asia</i>		
China	3	3.53
Japan	1	1.18
Taiwan	2	2.35
<i>Oceania</i>		
Australia	4	4.71

**Table S2.5** [This file has been uploaded separately]

### **Text S3 Latin America and the Caribbean WEF: Extended bibliometric results**

Research specifically addressing WEF in Latin America and the Caribbean contexts is relatively small and nascent, with notable publications emerging and growing since 2018 (Table S3.1, Figure S3.1). Reflecting this emerging research agenda, peer-reviewed research outputs have been published in a small number of journal outlets, mainly interdisciplinary environmental outlets (Table S3.2). Based on a thematic analysis of author keywords, WEF research in Latin America and the Caribbean spans multiple focal domains, covering both conceptualization (nexus characterization; tools, methods, and approaches) and application (resource management and extraction; resource scarcity and security; food, water and energy sectors; sustainable development; ecosystems; governance and urban systems) across multiple geographies (Table S3.3).

The geographical scope of WEF nexus research is mainly at the country level, with a smaller focus at the continental-regional scale (Figure S3.2). The country-level focus is centred on 5 countries, Argentina, Brazil, Colombia, Mexico, and Peru. Although researchers are located at institutions across the world, both in the Global North and Global South, most are in European and North American institutions, with fewer Latin American and Caribbean-based researchers and research institutions (Figure S3.3).

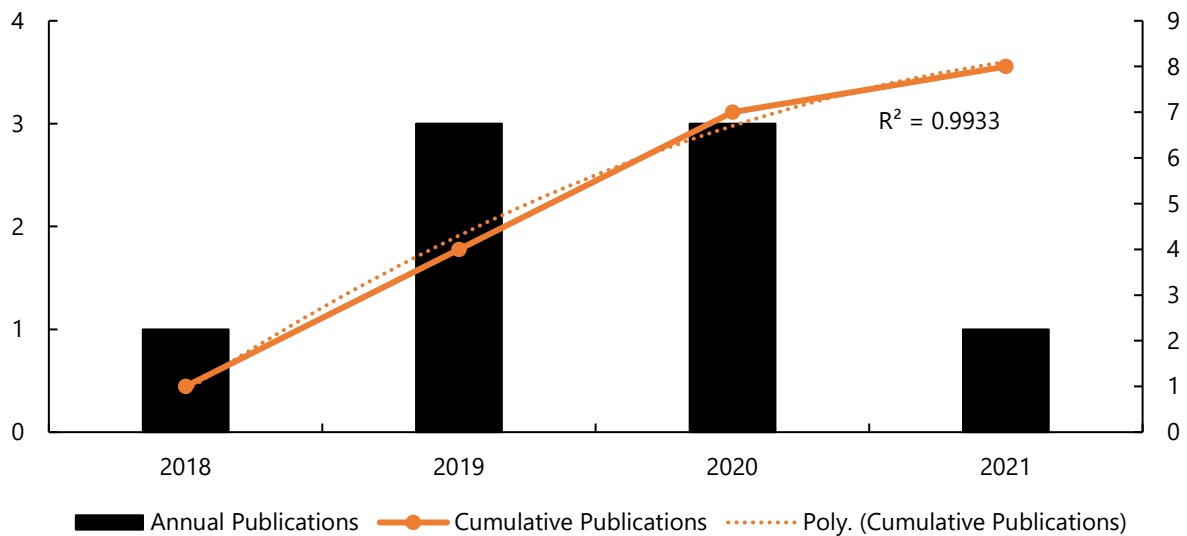
Research publications are frequently multi-institutional, averaging  $2.88 \pm 1.53$  institutions per publication, but ranging between 1 to 6 institutions. Most publications are authored by institutions purely from the Global North (45%), or collaborations between Global North and Global South partners (44%), with fewer publications authored solely by researchers based in institutions in the Global South (11%) (Figure S3.4).

Most institutions conducting research are from the university sector, with a smaller percentage from independent think tanks and research institutes and development agencies (Figure S3.5). Government entities fund most WEF research (45%) followed by the university sector (33%), while smaller but important contributions are made by the third sector, and international organizations and development banks (Figure B6).

Research funding sources mirror the institutional locations of authors, with most funding derived from European and North American sources (Table S3.4). This means that while there is, to some degree, a varied funding landscape, most money is channeled from Global North organizations, mainly the UK and USA (Table S3.5).

**Table S3.1** Type and number of peer-reviewed documents

Document Type	Number of Documents	(%) by Document Type
Article	8	88.89
Conference Proceedings, Conference Papers	1	11.11
<b>Total</b>	<b>9</b>	<b>100</b>



**Figure S3.1.** Publication frequency and trend analysis of Latin American and Caribbean-related WEF literature. This is based on peer-reviewed studies only. Graph shows both the annual and cumulative number of publications for the period 2018 to 2021. Polynomial trend best fits ( $R^2 = 0.99$ ) the growth in publications.

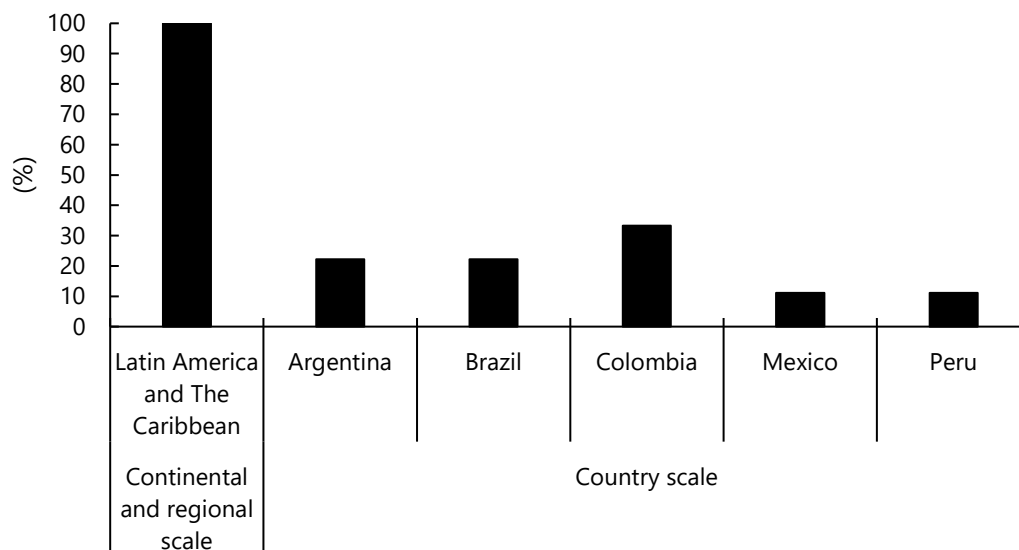
**Table S3.2.** Top 5 journal outlets for Latin America and Caribbean WEF-related articles. Based on (n=9) publications. Nine different journals were identified, each having a frequency of one publication, thus the top five journals selected are those having the highest impact factor.

<b>Journal name</b>	<b>No. of Published Articles</b>	<b>Scope of journal</b> (described on the journal's website)
<i>Resources, Conservation and Recycling</i>	1	Sustainable management and conservation of resources, emphasizing the transformation processes involved in a transition toward more sustainable production and consumption systems. Emphasis is upon technological, economic, institutional and policy aspects of specific resource management practices, such as conservation, recycling, and resource substitution, and of "systems-wide" strategies, such as resource productivity improvement, the restructuring of production and consumption profiles and the transformation of industry.
<i>Journal of Cleaner Production</i>	1	International, transdisciplinary journal focusing on cleaner production, environmental, and sustainability research and practice. Aims to help societies become more sustainable. The journal serves as a platform for addressing and discussing theoretical and practical cleaner production, encompassing environmental, and sustainability issues in corporations, governments, education institutions, regions, and societies.
<i>Science of the Total Environment</i>	1	International multi-disciplinary journal for publication of novel, hypothesis-driven and high-impact research on the total environment, which interfaces the atmosphere, lithosphere, hydrosphere, biosphere, and anthroposphere.
<i>Energy</i>	1	Energy is an international, multi-disciplinary journal in energy engineering and research. The journal covers research in mechanical engineering and thermal sciences, with a strong focus on energy analysis, energy modelling and prediction, integrated energy systems, energy planning and energy management. Other topics are energy conservation, energy efficiency, biomass and bioenergy, renewable energy, electricity supply and demand, energy storage, energy in buildings, and economic and policy issues, provided such topics are within the context of the broader multi-disciplinary scope of Energy.
<i>Land Use Policy</i>	1	Interdisciplinary journal concerned with the social, economic, political, legal, physical, and planning aspects of urban and rural land use. It provides a forum for the exchange of ideas and information from the diverse range of disciplines and interest groups which must be combined to formulate effective land use policies.

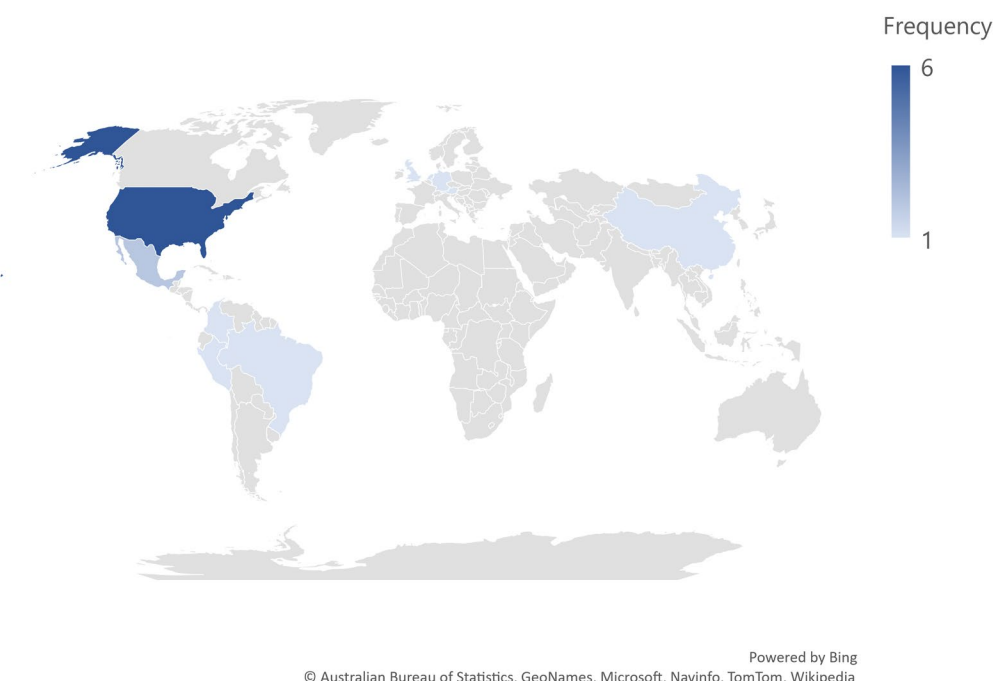
**Table S3.3.** Author keyword analysis. Keywords were analyzed inductively, with research themes emerging through the clustering of connected keywords. In total, 42 keywords were analyzed represent 12 domains.

Theme	No. of keywords comprising theme	% Of total keywords	keywords
<i>Nexus characterisation</i>	7	16.66	Water-energy-food nexus/WEF nexus (5); food-energy-water nexus (2)
<i>Sustainable development</i>	5	11.90	Sustainability (3); sustainable development goals (1); sustainable development (1)
<i>Tools/Methods/Approaches</i>	4	9.52	Index (1); Trade-off analysis (1); global agro-ecological model (1); multi-regional input-output analysis (1)
<i>Ecosystems</i>	3	7.14	Ecosystem services (1); semi-arid (1); PES (1)
<i>Resource management and extraction</i>	3	7.14	Resource management (1); mining (1); hydraulic fracturing (1)
<i>Resource scarcity and security</i>	2	4.76	Resource security (1); water stress (1)
<i>Water sector</i>	3	7.14	water supply (1); sustainable water management (1); hydrology (1)
<i>Food sector</i>	2	4.76	Agriculture (1); sugar crops (1)
<i>Energy sector</i>	1	2.38	Unconventional oil and gas (1)
<i>Governance</i>	2	4.76	Environmental justice (1); scale politics (1)
<i>Urban</i>	1	2.38	Urban systems (1)
<i>Geographic location</i>	9	21.42	Latin America (2); The Caribbean (1); Latin America and the Caribbean (1); Colombia (1); Argentina (1); Vaca Muerta (1); Caatinga (1); Andean watersheds (1)

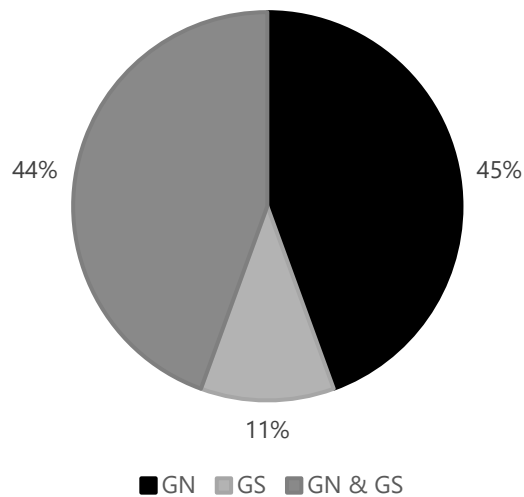




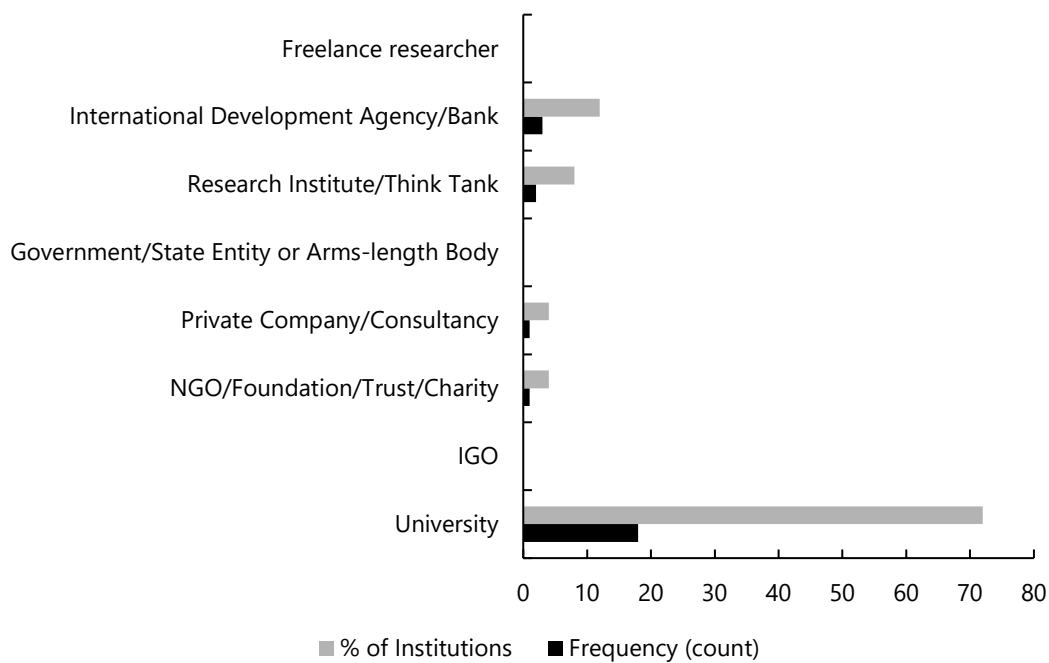
**Figure S3.2.** Geographical scale and focus of Latin America and Caribbean WEF studies. Twelve geographical locations identified from (n=9) article abstracts. Overall, 25% of total identified geographical foci of concern were at the continental-regional scale, whilst 75% were at the country scale. The continental-regional scale % calculations based on a denominator of 3, country scale % calculations based on a denominator of 9.



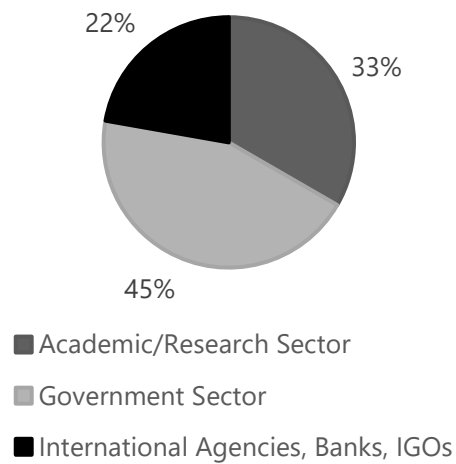
**Figure S3.3** Geographical locations of authors and associated country-level frequency based on institutional affiliation. Ten countries are represented. In cases where authors on the same publication were from either the same or different institution but within the same country, that country was only counted once.



**Figure S3.4.** Geographical composition of publications based on author institutional affiliations. Numbers refer to percentages. GN (Global North); GS (Global South); GN & GS (Global North & Global South).



**Figure S3.5** Institutional categorization of authors based on their identified affiliation, translated into a general sector description.



**Figure S3.6** Funding of WEF research by general sector according to publication funding information.

**Table S3.4** Countries associated with the funding sources identified from (n=9) articles.

Countries funding WEF research	Frequency (counts)	%
<i>Europe</i>		
UK	2	22.22
Germany	1	11.11
<i>North America</i>		
USA	4	44.44
<i>Latin America</i>		
Brazil	2	22.22

**Table S3.5** Funding sources and organizations supporting Latin America and Caribbean WEF research. A total of 9 funding sources representing 8 different funding organizations were identified.

<b>Academic/Research Sector</b>	<b>(n=)</b>	<b>Government Sector</b>	<b>(n=)</b>	<b>International Agency/Bank /IGO</b>	<b>(n=)</b>
Global Challenges Research Fund (GCRF), UK	1	USDA National Institute of Food and Agriculture, USA	1	Inter-American Development Bank, USA	2
Natural Environment Research Council (NERC), UK	1	Brazilian National Council for Scientific and Technological Development, Brazil	1		

University of Miami, USA	1	CAPES Foundation, Brazil	1		
		Federal Ministry of Economic Cooperation and Development (BMZ), Germany	1		
<b>Total</b>	<b>3</b>		<b>4</b>		<b>2</b>

#### **Text S4 Asian WEF: Extended bibliometric results**

Research on WEF in Asia has been growing over the last decade, with the number of articles and reviews increasing, especially since 2016: most (31/39 or 79.45%) have been published within the last 5 years (Table S4.1, Figure S4.1). Peer-reviewed research outputs have been published in a wide variety of journals, though journals with the greatest frequency of publications are interdisciplinary environmental outlets with a particular prominence to those in the water domains, namely: *Water* (Switzerland); *International Journal of Water Resources Development*; *Water Alternatives*; *Nature Sustainability* and *Renewable and Sustainable Energy Reviews* (Table S4.2).

Based on a thematic analysis of 246 author keywords, WEF research in Asia spans 19 focal domains, covering conceptualization (nexus characterization; tools, methods and approaches; and nexus thinking) and application (resources: use, security and scarcity; food, water and energy sectors; policy and governance; economics, finance and development; climate change; sustainable development; transboundary characterization and issues; ecosystems; general resource management; urban; social concerns; disciplinary perspectives; system understandings) across multiple geographies (Table S4.3).

The geographical scope of WEF nexus publications covers continental (37.68%), country (39.13%) and regional-basin (23.19%) scales (Figure S4.2). At the continental scale, Central and South Asia figure prominently, which decomposes to a strong focus on the Mekong, Aral Sea and Hindu Kush Himalaya regions. Meanwhile, at the country/sub-country scale, China and certain Central Asian countries are dominant.

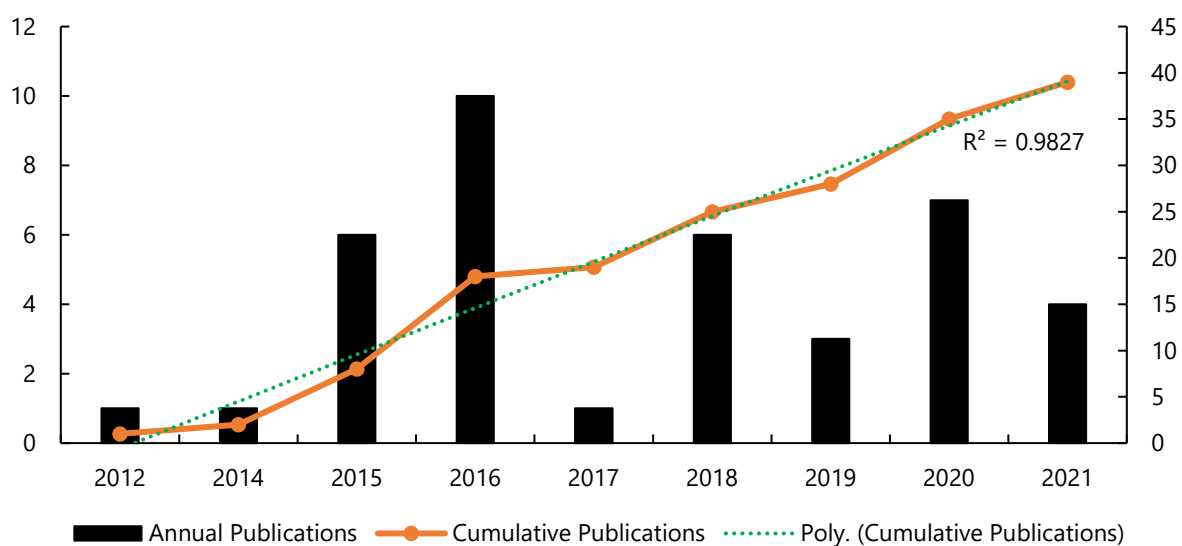
Evidenced from available author affiliations, researchers work in institutions located across 29 different countries in both the Global North and Global South: 11 European and North American countries; 14 Asian countries, 3 Latin American countries, and 1 Oceania country (Figure S4.3). Of the 92 affiliations identified from 47 publications, almost half (48.91%) relate to institutions based in Asian countries. The five most prominent countries participating in WEF nexus research, based on author institutional affiliation, are the USA, Nepal, Germany, UK, and Kazakhstan.

Research publications are frequently multi-institutional, averaging  $2.36 \pm 2.12$  institutions per publication, but range between 1 to 11 institutions. Most publications are authored by institutions purely from the Global North (38%), or collaborations between Global North and Global South partners (30%), with fewer publications authored solely by institutions based in the Global South (32%) (Figure S4.4).

Most institutions conducting research are from the university sector (71.17%), with state-related and independent think tanks and research institutes making a smaller (14.41%) contribution (Figure S4.5). That said, Government entities fund most WEF research (52%) followed by the university sector (29%), while smaller contributions are made by the third sector, and international organizations and development banks (Figure S4.6). Analysis of research funding indicates 57 different sources, with most from Asia (36.84%), followed by Europe (33.33%) and then North America (19.30%). Prominent individual countries include USA, China, Australia, UK, Switzerland, and Canada (Table S4.4). There is a varied and mixed institutional landscape of funding (Table S4.5). However, European and North America sources collectively contribute more than 50% of total financial institutional contributions.

**Table S4.1** Type and number of included documents

Document Type	Number of Documents	As a % of document Types
Article	36	76.60
Review	3	6.38
Conference Proceeding	1	2.13
Book/Book chapter	7	14.89
<b>Total</b>	<b>47</b>	<b>100</b>

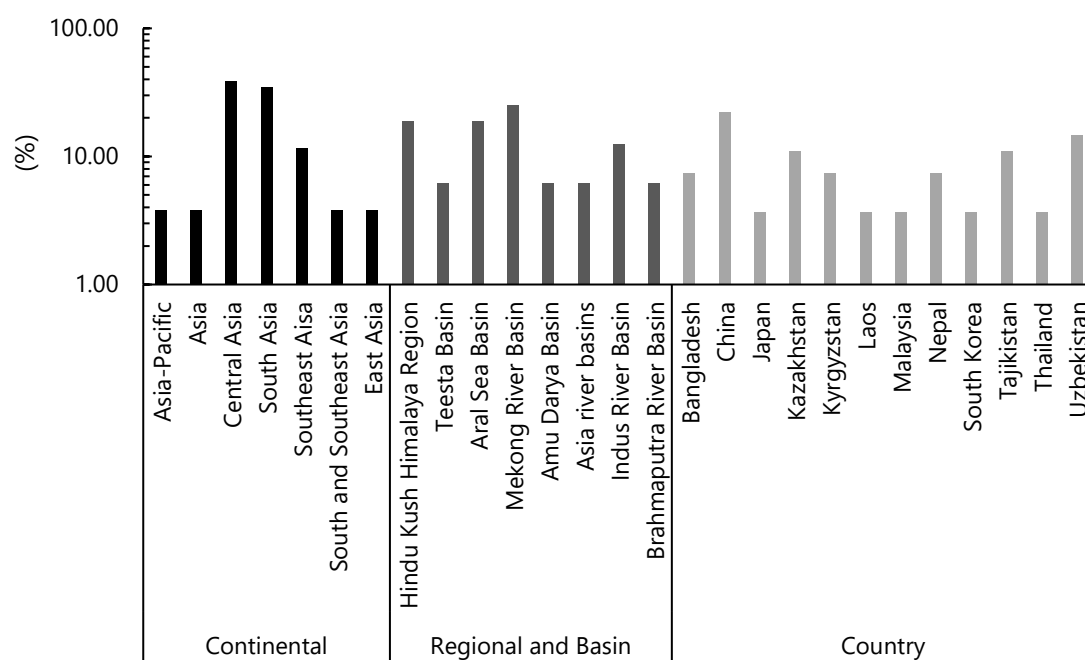


**Figure S4.1** Publication frequency and trend analysis of Asian-related WEF literature. This is based on (n=39) peer-reviewed research articles. Polynomial trend best fits ( $R^2 = 0.98$ ) the growth in publications.

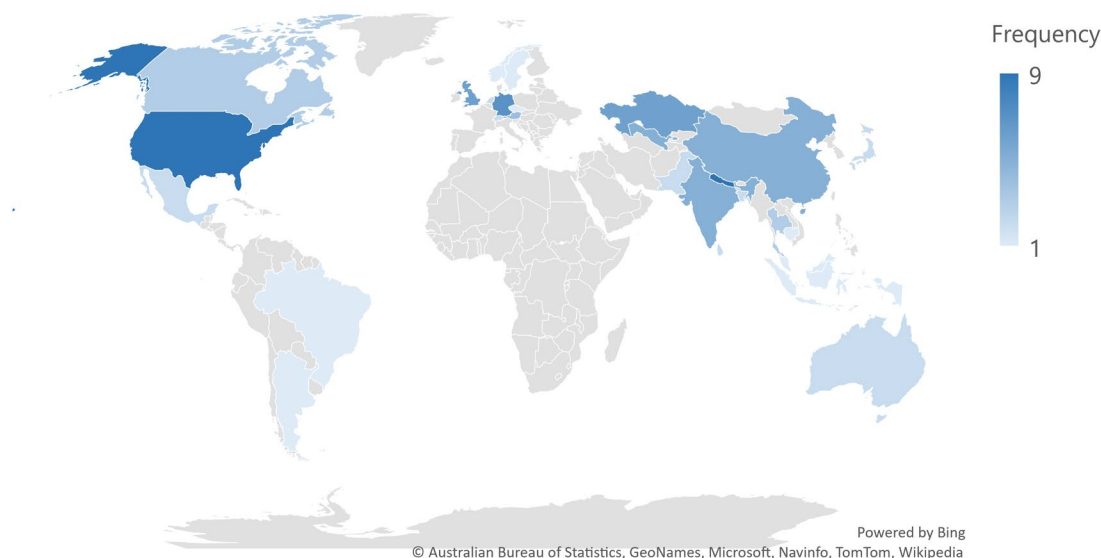
**Table S4.2** Top 5 journal outlets for Asian WEF-related articles based on (n=39) peer reviewed articles. In total, 28 different journal periodicals were identified. The top 5 were determined by frequency of publications, but in cases where frequency of publication was the same journal impact factor was applied to determine inclusion in this list.

<b>Journal name</b>	<b>No. of Published Articles</b>	<b>Scope of Journal</b> (described on the Journal's website)
<i>Water</i> (Switzerland)	8	International and interdisciplinary open-access journal covering all aspects of water, including water science, technology, management, and governance.
<i>International Journal of Water Resources Development</i>	4	The mission of the International Journal of Water Resources Development is to improve the access and use of water globally by publishing the latest developments in planning, policy-making and management from all over the world. Technical, economic, financial, social, environmental, legal, and institutional aspects of water, and interdependences and inter-linkages between the water and the agricultural, energy, industry, health, environment, and other sectors.
<i>Water Alternatives</i>	3	An interdisciplinary journal addressing the full range of issues that water raises in contemporary societies. Its ambition is to provide space for alternative and critical thinking on such issues. welcomes contributions that address any dimension of water resources development, management and use in their relations with society and the environment.
<i>Nature Sustainability</i>	1	Publishes significant original research from a broad range of natural, social and engineering fields about sustainability, its policy dimensions and possible solutions. Understanding how to ensure the well-being of current and future generations within the limits of the natural world is the overarching goal of sustainability research.
<i>Renewable and Sustainable Energy Reviews</i>	1	Communicate the most interesting and relevant critical thinking in renewable and sustainable energy in order to bring together the research community, the private sector and policy and decision makers. The aim of the journal is to share problems, solutions, novel ideas and technologies to support the transition to a low carbon future and achieve our global emissions targets as established by the United Nations Framework Convention on Climate Change.

**Table S4.3** [This file has been uploaded separately]



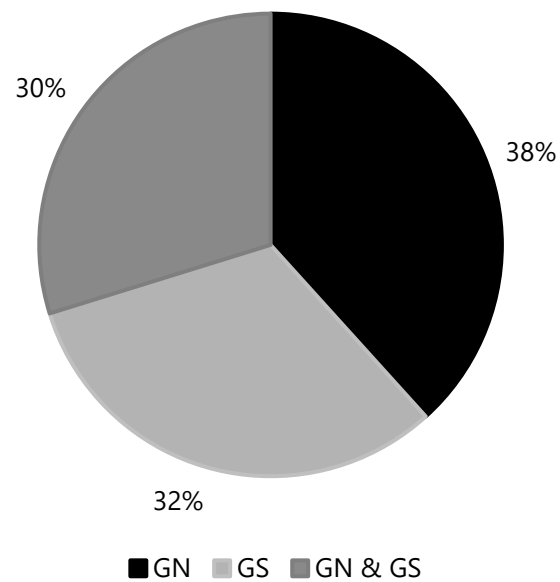
**Figure S4.2** Geographical scale and focus of Asian WEF studies. Locations identified from (n=46) article abstracts. Percentages are based on the frequency (count) with which each scale is mentioned across publications (continental (26), country (27) and regional-basin (16)), with percentages calculated for each scale using those numbers as denominators. The Y-axis is presented on a logarithmic scale.



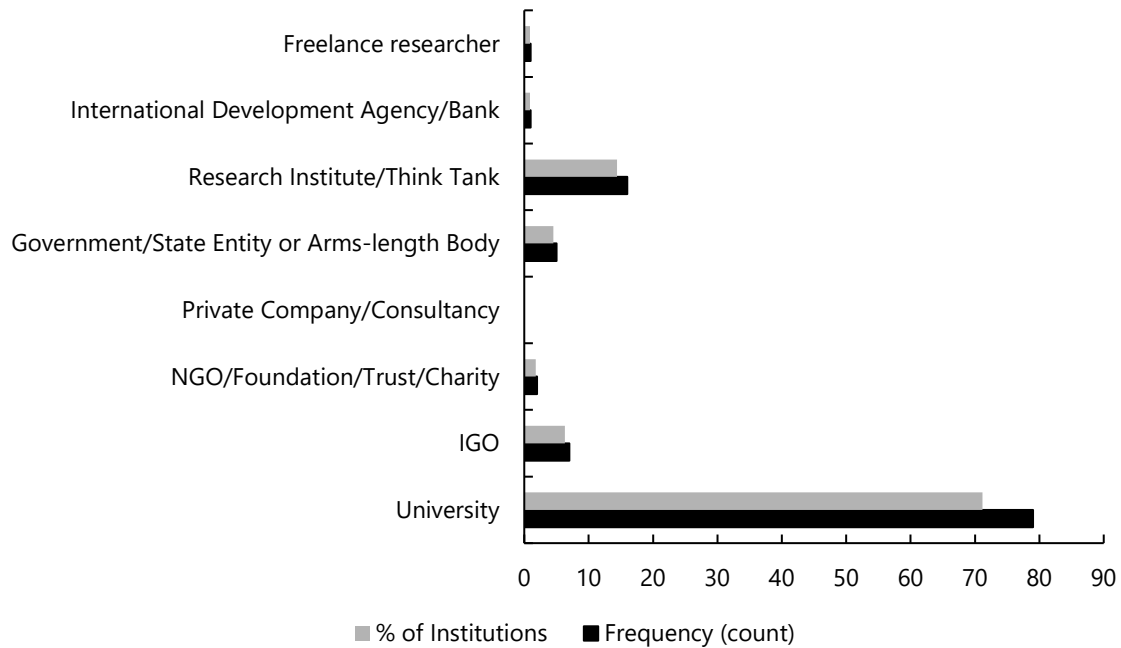
**Figure S4.3** Geographical locations of authors and associated country-level frequency based on identified institutional affiliation. In total, 29 countries were identified. In cases



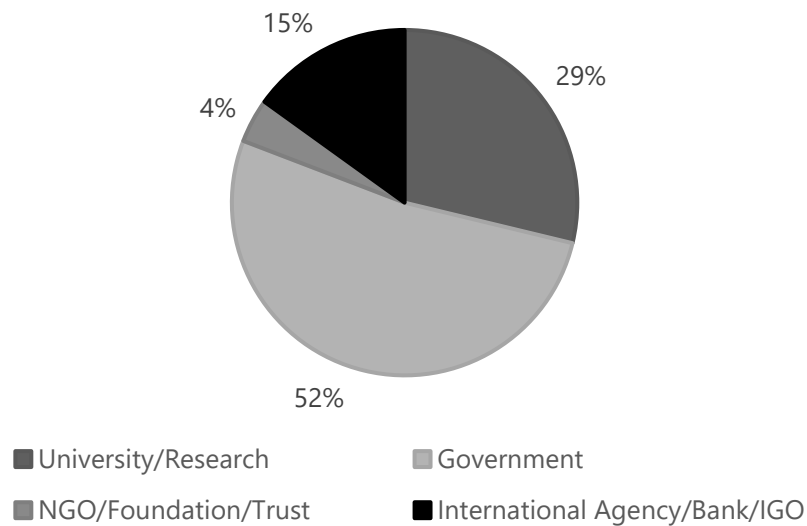
where authors on the same publication were from either the same or different institution within the same country, that country was only counted once.



**Figure S4.4** Geographical composition of publications based on author institutional affiliations. Numbers refer to percentages. GN (Global North); GS (Global South); GN & GS (Global North & Global South).



**Figure S4.5** Institutional categorization of authors based on their identified affiliation translated into a general sector description.



**Figure S4.6** Funding of WEF research by general sector according to publication funding description (n=24 publications).

**Table S4.4** Countries associated with identified funding sources (n=24 publications). Highlighted percentages identify those countries that are the most significant funding sources for research on Asian WEF, namely: USA, China, UK, Switzerland, Canada and Australia.

<b>Countries funding WEF research</b>	<b>Frequency (counts)</b>	<b>%</b>
<i>Europe</i>		
Austria	2	3.51
Czech Republic	1	1.75
European Commission	1	1.75
Finland	3	5.26
Germany	1	1.75
Sweden	3	5.26
Switzerland	4	<b>7.02</b>
UK	4	<b>7.02</b>
<i>North America</i>		
USA	7	<b>12.28</b>
Canada	4	<b>7.02</b>
<i>Asia</i>		
Bangladesh	2	3.51
Bhutan	1	1.75
Cambodia	2	3.51
China	5	<b>8.77</b>
India	3	5.26
Japan	2	3.51
Jordan	1	1.75
Myanmar	1	1.75
Nepal	3	5.26
Pakistan	1	1.75
<i>Oceania</i>		
Australia	5	<b>8.77</b>
<i>United Nations</i>	1	1.75

**Table S4.5** [This file has been uploaded separately]