

This document contains supplementary material related to the article:

Esteban, S.A., Urquía-Grande, E., Martínez de Silva, A. and Pérez-Estébanez, R. (2022). Big Data, Accounting and International Development: Trends and challenges. *Cuadernos de Gestión*, 22(1). <https://doi.org/10.5295/cdg.211513sa>

Supplementary Figures

Figure S1: Top-Authors' Production over the Time

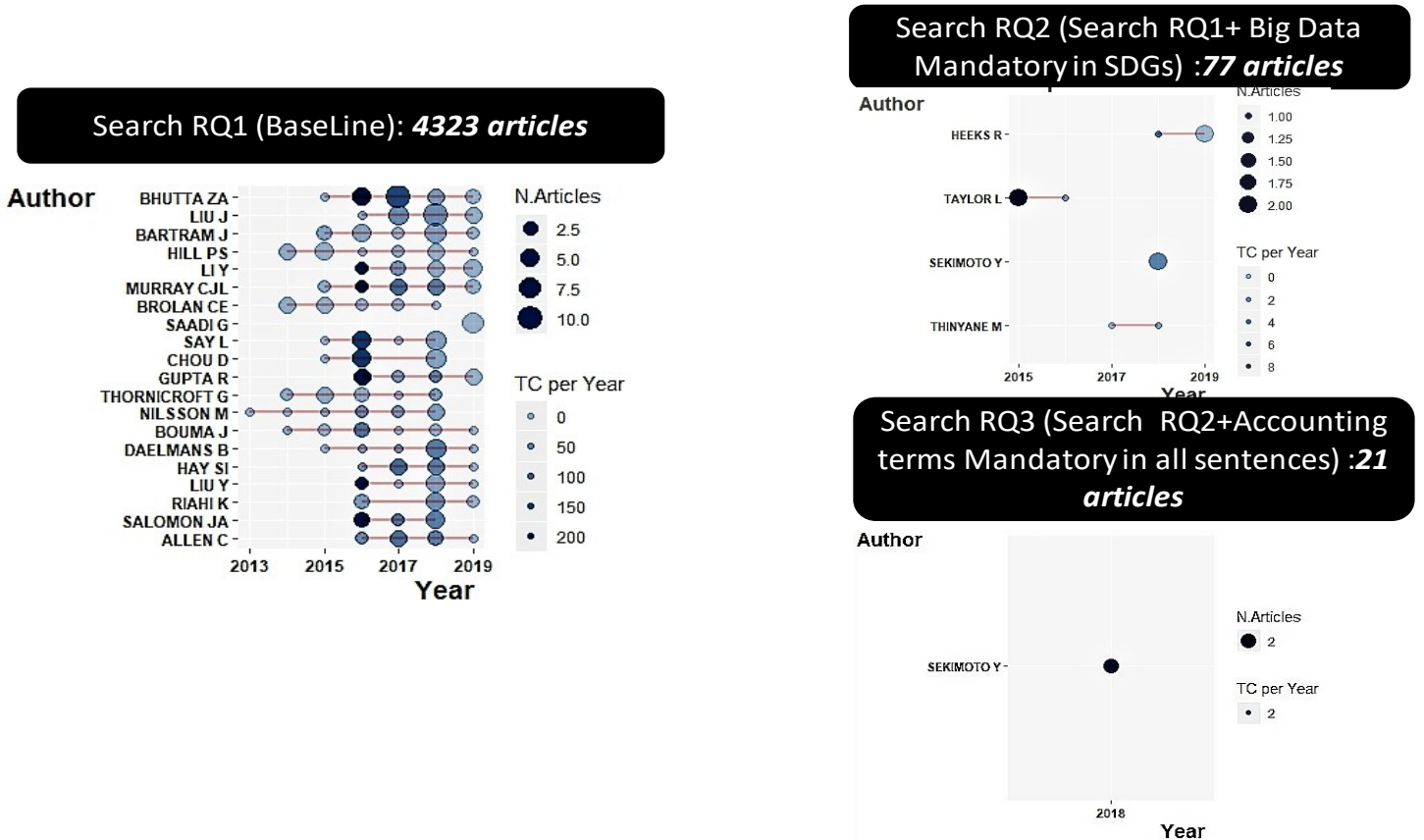
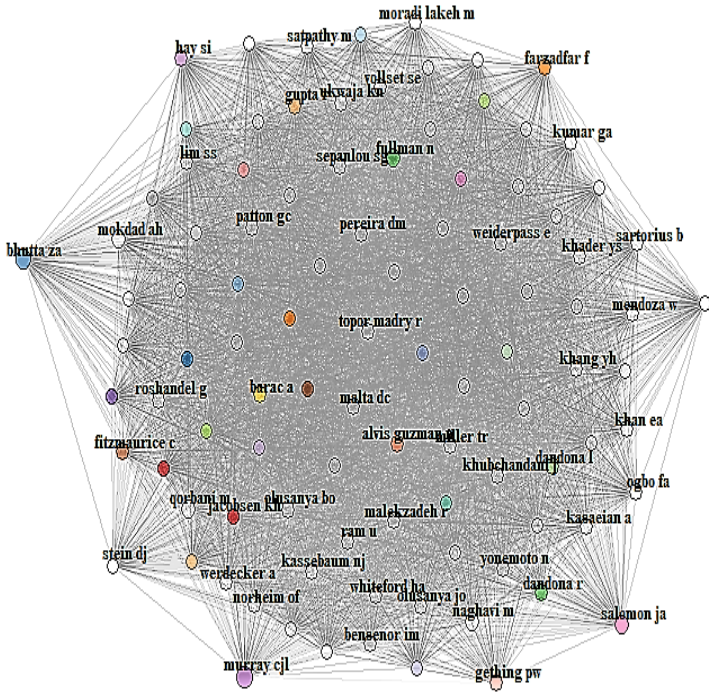


Figure S2: Coupling Analysis

RQ1 (BaseLine): Author's Coupling



RQ1 (BaseLine): Author's Collaboration

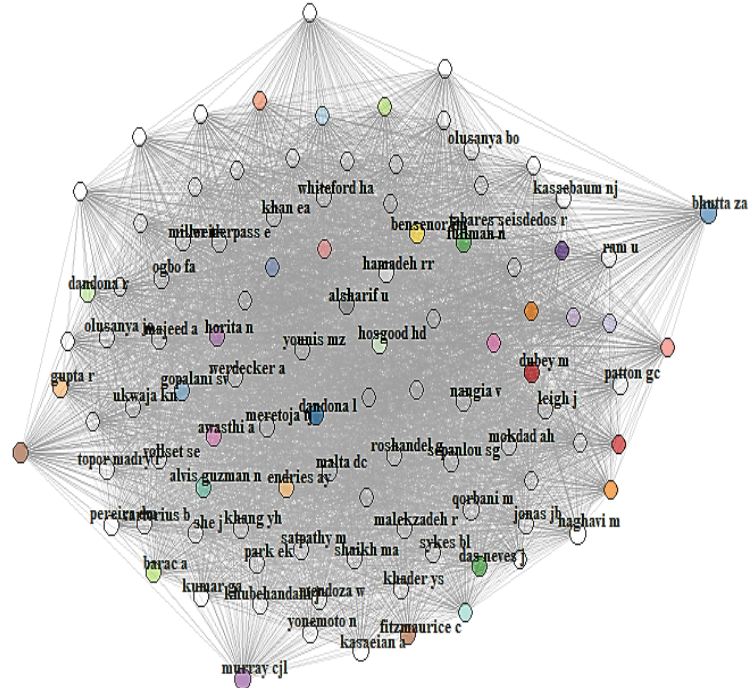


Figure S3: Author's Coupling (articles with less than 25 co-authors): **Search RQ1**

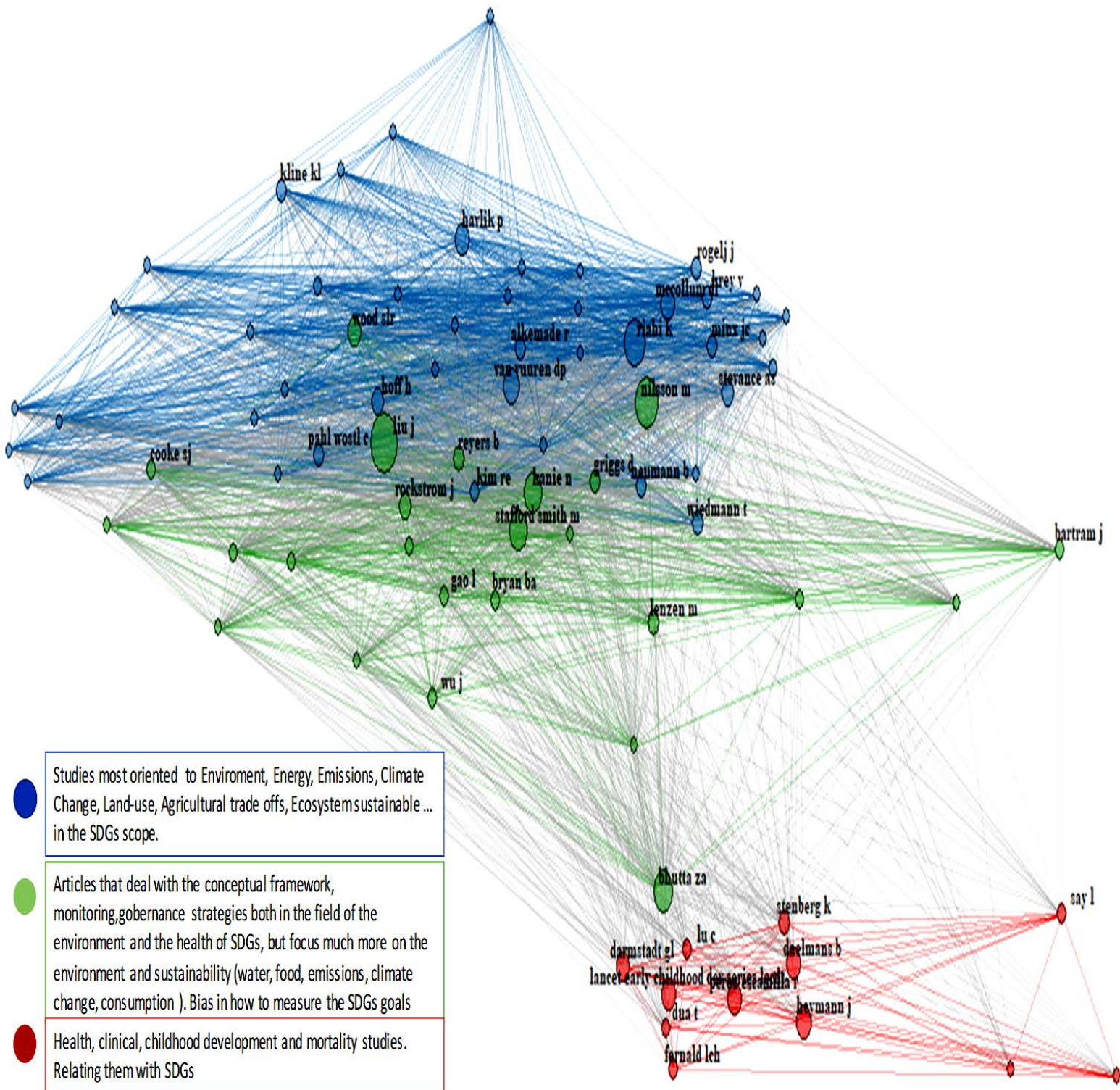
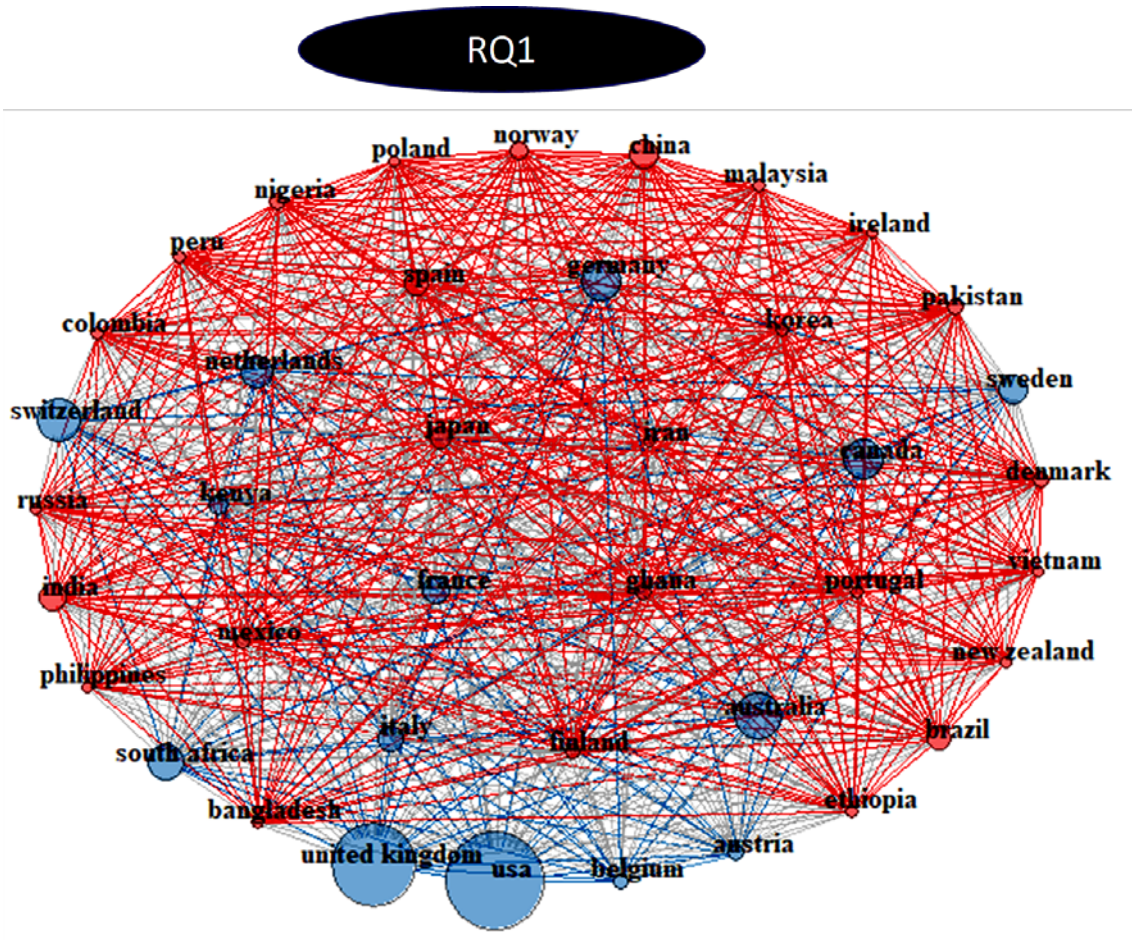


Figure S4: Country collaboration baseline search



Supplementary Tables

Table S1: Number of Documents by Organization-Enhanced of WoS (based in all authors of each document)

RQ1 (BaseLine): 4323 articles		RQ2 (RQ1+ Big Data Mandatory in SDGs) :77 articles		RQ3 (RQ2+Accounting terms Mandatory in all sentences) :21 articles	
Organizations-Enhanced	N. of Docs	Organizations-Enhanced	N. of Docs	Organizations-Enhanced	N. of Docs
UNIVERSITY OF LONDON	255	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	5	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	2
WORLD HEALTH ORGANIZATION	205	UNIVERSITY OF AMSTERDAM	4	MUSEUM NATIONAL D HISTOIRE NATURE	2
LONDON SCHOOL OF HYGIENE TROPICAL	116	UNIVERSITY OF TOKYO	4	SORBONNE UNIVERSITE	2
HARVARD UNIVERSITY	101	UNIVERSITY OF CALIFORNIA SYSTEM	3	UNIVERSITY OF AMSTERDAM	2
UNIVERSITY OF OXFORD	92	UNIVERSITY OF MANCHESTER	3	UNIVERSITY OF TOKYO	2
JOHNS HOPKINS UNIVERSITY	84	CORNELL UNIVERSITY	2	UNIVERSITY OF TRENTO	2
UNIVERSITY COLLEGE LONDON	81	MUSEUM NATIONAL D HISTOIRE NATURE	2		
UNIVERSITY OF CALIFORNIA SYSTEM	80	SORBONNE UNIVERSITE	2		
HARVARD TH CHAN SCHOOL OF PUBLIC H	74	SWANSEA UNIVERSITY	2		
UNIVERSITY OF QUEENSLAND	72	UNIVERSITY OF CALIFORNIA BERKELEY	2		
UNIVERSITY OF CAPE TOWN	71	UNIVERSITY OF LONDON	2		
WAGENINGEN UNIVERSITY RESEARCH	66	UNIVERSITY OF OXFORD	2		
COLUMBIA UNIVERSITY	59	UNIVERSITY OF TRENTO	2		
UNIVERSITY OF TORONTO	58	UNIVERSITY OF WATERLOO	2		
THE WORLD BANK	54				

Table S2: Rankings of different types of citations Search **RQ1**

Ranking Articles of RQ1 in WoS		Ranking References of RQ1 (frequency of citations)		Ranking Local References of RQ1(frequency of citations)		
	Nº. Citations in WoS		Nº. Citations in the search	Top 10 of references most cited in the search and listed in itself	Nº. Local Citations	Nº. CitationS in WoS
Top 10 of Search articles by WoS		Top 10 of references most cited in the search				
KASSEBAUM NJ, 2016, LANCET	624	UNITED NATIONS (UN), 2015, TRANSF OUR WORLD 203.	352	GRIGGS D, 2013, NATURE	143	620
GRIGGS D, 2013, NATURE	620	GRIGGS D, 2013, NATURE,	143	SACHS JD, 2012, LANCET	138	317
KATES RW, 2005, ENVIRONMENT	377	SACHS JD, 2012, LANCET	133	NILSSON M, 2016, NATURE	111	175
ALKEMA L, 2016, LANCET	373	STEFFEN W, 2015, SCIENCE	121	LE BLANC D, 2015, SUSTAIN DEV	72	105
LIU L, 2016, LANCET	366	ROCKSTROM J, 2009, NATURE	113	HAK T, 2016, ECOL INDIC	50	109
SACHS JD, 2012, LANCET	317	NILSSON M, 2016, NATURE	111	LIM SS, 2016, LANCET	38	153
PECL GT, 2017, SCIENCE	302	[ANONYMOUS], 2015, MILL DEV GOALS REP 2.	102	GRIGGS D, 2014, ECOL SOC	36	67
KEESSTRA SD, 2016, SOIL	264	UNITED NATIONS, 2015, SUST DEV GOALS.	77	VICTORA CG, 2016, LANCET	32	112
ZHANG X, 2015, NATURE	242	LE BLANC D, 2015, SUSTAIN DEV	74	HAJER M, 2015, SUSTAINABILITY	30	80
BLACK MM, 2017, LANCET	224	SEN A., 1999, DEV FREEDOM.	65	WAAGE J, 2015, LANCET GLOB HEALTH	28	45

Table S3: Rankings of different types of citations **RQ2**

Ranking Articles of RQ2 in WoS		Ranking References of RQ2 (frequency of citations)		Ranking Local References of RQ2 (frequency of citations)		
	Nº. Citations in WoS		Nº. Citations in the search	Top 10 of references most cited in the search and listed in itself	Nº. Local Citations	Nº. CitationS in WoS
Top 10 of Search articles by WoS		Top 10 of references most cited in the search				
BIBRI SE, 2017, SUST CITIES SOC	90	KITCHIN R, 2014, GEOJOURNAL, V79, P1, DOI 10.1007/S1	7	HILBERT M, 2016, DEV POLICY REV	4	86
HILBERT M, 2016, DEV POLICY REV	86	MAYER-SCHONBERGER V, 2013, BIG DATA REVOLUTION.	6	TAYLOR L, 2015, GEOFORUM	2	22
KISSLING WD, 2018, BIOL REV	44	BATTY M, 2012, EUR PHYS J-SPEC TOP, V214, P481, DOI 1	5	TAYLOR L, 2015, GEOJOURNAL	1	22
TAYLOR L, 2015, GEOFORUM	22	BENGTSSON L, 2011, PLOS MED, V8, DOI 10.1371/JOURN	5	PFEFFER K, 2016, EUR J DEV RES	1	4
TAYLOR L, 2015, GEOJOURNAL	22	SEN AMARTYA, 1999, DEV FREEDOM.	5			
BEBBINGTON J, 2018, ACCOUNT AUDIT ACCOUNT	12	AL NUAIMI E, 2015, J INTERNET SERV APPL, V6, DOI 10.1	4			
VARSHNEY KR, 2015, BIG DATA	11	ALBINO V, 2015, J URBAN TECHNOL, V22, P3, DOI 10.108	4			
BECK EJ, 2016, GLOB HEALTH ACTION	9	BLUMENSTOCK J, 2015, SCIENCE, V350, P1073, DOI 10.11	4			
HALEWOOD M, 2018, NEW PHYTOL	8	BOYD D, 2012, INFORM COMMUN SOC, V15, P662, DOI 1	4			
HEEKS R, 2018, INF DEV	8	HILBERT M, 2016, DEV POLICY REV, V34, P135, DOI 10.11	4			
		MANYIKA J., 2011, BIG DATA NEXT FRONTI.	4			
		WESOLOWSKI A, 2012, SCIENCE, V338, P267, DOI 10.112	4			

Table S4: Mapping Search A main concepts vs SDGs

SDGs	With associated concept	Examples related words
GOAL 1: No Poverty	X	<i>poverty</i>
GOAL 2: Zero Hunger	X	food, land use, land
GOAL 3: Good Health and Well-being	X	health, disease, mortality, sanitation...
GOAL 4: Quality Education		
GOAL 5: Gender Equality		
GOAL 6: Clean Water and Sanitation	X	water, sanitation
GOAL 7: Affordable and Clean Energy	X	energy, emissions, carbon
GOAL 8: Decent Work and Economic Growth		growth
GOAL 9: Industry, Innovation and Infrastructure		
GOAL 10: Reduced Inequality		
GOAL 11: Sustainable Cities and Communities	X	emissions, urban, services
GOAL 12: Responsible Consumption and Production	X	sustainability, consumption
GOAL 13: Climate Action	X	climate-change, emissions, environmental, ecosystem
GOAL 14: Life Below Water	X	conservation, biodiversity, ecosystem, water
GOAL 15: Life on Land	X	conservation, biodiversity, ecosystem, land-use
GOAL 16: Peace and Justice Strong Institutions		
GOAL 17: Partnerships to achieve the Goal		