



Analysis of Research Related to the Sustainable Development Goals

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Executive summary

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This report, commissioned by the Departamento Administrativo de Ciencia Tecnología e Innovación Colciencias, provides an objective, bibliometrics based analyses of Colombia's research on the United Nations (UN) Sustainable Development Goals (SDGs). The analyses presented herein assess the SDG-related publication output of Colombia, Mexico, and Brazil compared to five leading countries in the SDG field during the period 2007-2016. Each of the 17 SDGs have been analysed with regards to publication output and impact, measured by Field-Weighted Citation Impact and Field-Weighted Download Impact. Additionally, we present the most relevant key phrases per SDG to provide insight on the topics of focus for each country's SDG-related research.

The publication output of Colombia ranges from just 19 publications on SDG4 (Quality Education) to 620 publications on SDG13 (Climate Action). However, most of the SDGs range between 100 and 300 publications. In fact, this publication output somewhat reflects the global publication output on the SDG. The ones with the most publications globally do show the highest number in Colombia as well.

All SDG display a double digit annual growth rate across the period, mostly between 20 and 30%. SDG11 (Sustainable Cities) and SDG 12 (Consumption) have the highest annual growth rate with 42% and 40%, respectively. The lowest growth is seen for SDG10-related research (Reduced Inequalities) which has only 12% growth from 2007-2016.

The impact of Colombia's SDG publications, measured by field-weighted citation impact (FWCI), is above the global average for all research for every SDG except SDG4 (FWCI of 0.72). SDG5 (Gender Equality) and SDG3 (Hunger) are the most impactful areas with FWCI values of 2.11 and 1.77. This means, that publications from Colombia within these fields have been cited on average around twice as much as the global average for publications. The rest of the SDG yield FWCI values between 1.01 and 1.40.

Assessing patent counts per SDG reveals interesting trends in terms of where research supports real world applications and where this is less relevant. For SDGs related to the equality and reduction of the wealth gap (that is, SDG1, SDG4, SDG5, SDG8, SDG10, SDG16), very few patents are seen from either Colombia or worldwide. However, numerous patents are observed for SDGs related to climate change, energy efficiency and improved health.

Preface

With a global population of more than 7 billion a sustainable development is more important than ever. Sustainable development is defined as the “ability to make development sustainable – to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.”¹

Acknowledging this need, in September 2000 the Millennium Development Goals (MDGs) were agreed by the heads of states at the UN headquarter. The Millennium Development Goals (MDGs) covered peace, the environment, poverty and many other challenges, and the eight goals were to be achieved by 2015. Although some of the goals made progress over the years, it became clear that a revision would be required.

The successors of the MDGs are the Sustainable Development Goals (SDGs), which have been developed through a process of international collaboration, resulting in a proposal by the Open Working Group of 17 goals and 169 targets. These constituted a new set of goals that are actionable and aspirational, intended to help UN member states develop policies and set relevant agendas over the next 15 years. Finally, in January 2016, the Sustainable Development Goals (SDGs) replaced the Millennium Development Goals (MDGs). Unlike the MDGs, the SDGs are universal, applying to low-, middle- and high-income countries alike. They also constitute a much more complex agenda than the MDGs, explicitly seeking to integrate poverty alleviation with economic, social and environmental issues, and were the result of an exceptionally inclusive process.

However, what has been gained in comprehensiveness with a set of 17 goals and 169 targets, has been lost in brevity. This poses some challenges for countries for the practical applications of the SDGs. How will countries prioritize implementation and resource allocation for different targets and integrate them into their existing plans and policies? How will they set targets that reflect national circumstances and take into account starting points? Equally importantly, how are governments planning to monitor progress and make this information publicly available and comparable at the regional and global level?

Colombia was not only very engaged in the formulation of the SDG agenda but was also one of the first countries to make plans to align its national development objectives with the goals. Already in 2015, still during the debate about the content of the SDGs at UN level, Colombia launched the Inter-Agency Commission for the Preparation and Effective Implementation of the Post2015 Development Agenda and the SDGs. With this step, Colombia's government has ratified its commitment to the SDGs and put itself forward as a partner for this new global agenda.

¹ World Commission on Environment and Development (WCED), *Our Common Future* (New York: Oxford University Press, (1987), page 8

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Introduction

Colombia was one of the first countries to make plans to align its national development objectives with the Sustainable Development Goals. Already in 2015, still during the debate about the content of the SDGs at UN level, Colombia launched the Inter-Agency Commission for the Preparation and Effective Implementation of the Post2015 Development Agenda and the SDGs. This commission did not start from scratch since Colombia has a National Development Plan that sets out the government's priorities every four years.

The first version of the Plan, "Todos por un nuevo país", was drafted in 2014 and runs to 2018. The Plan should thus form the basis for achieving the political coherence needed for effective SDG implementation at the national level in Colombia.

There is a high level of alignment of the Colombian National Development Plan with the SDGs: 91 of the 169 SDG targets are related to the indicators of the National Development Plan.

In terms of priority policy areas, the National Development Plan outlined three – peace, equity and education – that are clearly linked to the 'five Ps'² of the SDG agenda.

Research related to SDGs can and will benefit Colombia's efforts in achieving SDG targets and help Colombia in being perceived as on the forefront of sustainable development. An objective, bibliometric assessment should inform on the current state of SDG related research in Colombia and the Departamento Administrativo de Ciencia Tecnología e Innovación Colciencias has asked Elsevier to provide them with this analysis. It is designed to support decision making with regards to what areas might benefit from an increase in funding.

As such, in this report, we compare Colombia's research output to that of 5 leading countries in the SDG field. Leaders in the SDG field will be determined based on publication output. Research output measured by publications and scientific impact along with the most prolific authors, institutions, collaboration partners, and journals being published in will be assessed. These analyses are done for each of the 17 SDGs. The SDG is defined by keywords, and the resulting publication sets in Scopus are analyzed according to the parameters below:

- Publications will focus on peer-reviewed publications and are thus defined as articles, reviews, and conference proceedings.
- Patent information analysis will be included according to the availability of information related to the SDGs.
- The study described herein will cover the period 2007-2016 (10 years).
- Included in the analysis will be aggregate level statistics on Colombia and five leading countries in each SDG field.

The National Development Plan 2014-2018 "Todos por un Nuevo país" (...) seeks to build a peaceful, equitable and educated Colombia, aligned with the National Government goals, with the best international practices and standards, and with a long-term vision based on the Sustainable Development Goals

(Colombian Congress, 2015)

² The 'five Ps' are: prosperity, partnership, peace, people and planet

About the tables and charts

The tables and charts presented in this report use consistent formatting throughout this report to facilitate easy visualization of minimum and maximum values.

For absolute counts and percentages, data in the tables are formatted according to the following approach: the highest value in the column is shaded darkest red with white text and the lowest value is shaded white with black text. For field-weighted citation impact, values below 1.0 are shaded green with white text because these values fall below the world average for all research. CiteScore values below 1.0 are also shaded green with white text to facilitate easy identification of journals for which the average count of citations for articles in the past 3 years is fewer than 1. An example of the data formatting is shown below.

Publication count	
Minimum value for column (if multiple minimum values, cell is same color for all)	4
	0
	11
	53
	285
	0
	5
Maximum value for column	1784
	23
	188
	78
	0

FWCI	
Minimum value for column (if multiple minimum values, cell is same color for all)	1.77
	1.02
Maximum value for column	2.12
Value below 1.0, world average for all research	0.95
	1.78

Appendix A

Methodology and Data Sources

Methodology and Rationale

Our methodology is based on the theoretical principles and best practices developed in the field of quantitative science and technology studies, particularly in science and technology indicators research. The *Handbook of Quantitative Science and Technology Research: The Use of Publication and Patent Statistics in Studies of S&T Systems* (Moed, Glänzel and Schmoch, 2004)²⁴ gives a good overview of this field and is based on the pioneering work of Derek de Solla Price (1978),²⁵ Eugene Garfield (1979)²⁶ and Francis Narin (1976)²⁷ in the US, and Christopher Freeman, Ben Martin and John Irvine in the UK (1981, 1987)²⁸, and in several European institutions including the Centre for Science and Technology Studies at Leiden University, the Netherlands, and the Library of the Academy of Sciences in Budapest, Hungary.

The analyses of bibliometric data in this report are based upon recognized advanced indicators (e.g., the concept of relative citation impact rates). Our base assumption is that such indicators are useful and valid, though imperfect and partial measures, in the sense that their numerical values are determined by research performance and related concepts, but also by other, influencing factors that may cause systematic biases. In the past decade, the field of indicators research has developed a best practices which state how indicator results should be interpreted and which influencing factors should be taken into account. Our methodology builds on these practices.

Counting

All analyses make use of whole counting rather than fractional counting. For example, if a paper has been co-authored by one author from Colombia and one author from Canada, then that paper counts towards both the publication count of Colombia, as well as the publication count of Canada. Total counts for each institution are the unique count of publications.

Key phrase Analysis

Key phrase analysis was done in SciVal to generate the word clouds of top 50 concepts represented in research at each institute in this report. SciVal uses the Elsevier Fingerprint Engine to extract distinctive key phrases within the Research Area. The text mining is done through applying a variety of Natural Language Processing techniques to the titles and abstracts of the documents from the institute in order to identify important concepts.

Concepts are matched against a set of thesauri spanning all major disciplines. For each document the distinctive key phrases are selected based on Inverse Document Frequency (IDF), by incorporating a factor that diminishes the weight of words that occur frequently in the document set, and increases the importance of words that occur rarely.

Each key phrase is given a relevance between 0 and 1 with 1 given to the most frequently occurring key phrase. Remaining key phrases are given a value based on their relative frequency.

For this report, key phrases were retrieved using Elsevier's tool, SciVal. SciVal permits the assessment of keyphrases from the past 5 years through the trends module. This is done because because language in research changes over time and assessing a longer period of research can dilute the ability to accurately capture the focus of recent work. Therefore, key phrase analysis focuses on research from the period 2012-2016.

Measuring Article Downloads

Citation impact is by definition a lagging indicator: newly-published articles need to be read, after which they might influence studies that will be carried out, which are then

²⁴ Moed H., Glänzel W., & Schmoch U. (2004). *Handbook of Quantitative Science and Technology Research*, Kluwer: Dordrecht.

²⁵ de Solla Price, D.J. (1977-1978). "Foreword," *Essays of an Information Scientist*, Vol. 3, v-ix.

²⁶ Garfield, E. (1979). Is citation analysis a legitimate evaluation tool? *Scientometrics*, 1 (4), 359-375.

²⁷ Pinski, G., & Narin, F. (1976). Citation influence for journal aggregates of scientific publications: Theory with application to literature of physics. *Information Processing & Management* 12 (5): 297-312.

²⁸ Irvine, J., Martin, B. R., Abraham, J. & Peacock, T. (1987). Assessing basic research: Reappraisal and update of an evaluation of four radio astronomy observatories. *Research Policy*, 16(2-4), 213-227.

written up in manuscript form, peer-reviewed, published and finally included in a citation index such as Scopus. Only after these steps are completed can citations to the earlier article be systematically counted. For this reason, investigating downloads has become an appealing alternative, since it is possible to start counting downloads of full text articles immediately upon online publication and to derive robust indicators over windows of months rather than years.

While there is a considerable body of literature on the meaning of citations and indicators derived from them,²⁹ the relatively recent advent of download derived indicators means that there is no clear consensus on the nature of the phenomenon that is measured by download counts.³⁰ A small body of research has concluded however that download counts may be a weak predictor of subsequent citation counts at the article level.³¹

In this report, a download is defined as the event where a user views the full-text HTML of an article or downloads the full-text PDF of an article from ScienceDirect, Elsevier's full-text journal article platform; views of an article abstract alone, and multiple full-text HTML views or PDF downloads of the same article during the same user session, are not included in accordance with the COUNTER Code of Practice 35. ScienceDirect provides download data for approximately 16% of the articles indexed in Scopus; it is assumed that user downloading behaviour across countries does not systematically differ between online platforms. Field-weighted download impact is calculated from these data according to the same principles applied to the calculation of field-weighted citation impact.

Data Sources

Scopus is Elsevier's abstract and citation database of peer-reviewed literature, covering 70 million documents published in over 22,800 journals, book series and conference proceedings by some 5,000 publishers.

Scopus coverage is multi-lingual and global: approximately 22% of titles in Scopus are published in languages other than English (or published in both English and another language). In addition, more than half of Scopus content originates from outside North America, representing many countries in

Europe, Latin America, Africa and the Asia Pacific region. Scopus covers approximately 6,400 titles from North America, 11,800 from Europe and 2,500 from Asia-Pacific and 1,500 from Latin-America and Africa. The geographical breadth of Scopus ensures comprehensive coverage of research outputs and impact of regionally-collaborated research.

Scopus coverage is also inclusive across all major research fields, with 7,500 titles in the Physical Sciences, 6,800 in the Health Sciences, 4,500 in the Life Sciences, and 8,100 in the Social Sciences (the latter including some 2,800 Arts & Humanities related titles). Titles which are covered are predominantly serial publications (journals, trade journals, book series and conference material), but considerable numbers of conference papers are also covered from stand-alone proceedings volumes (a major dissemination mechanism, particularly in the computer sciences). Acknowledging that a great deal of important literature in all fields (but especially in the Social Sciences and Arts & Humanities) is published in books, Scopus has begun to increase book coverage in 2013, and currently covers more than 121,000 books.

For this report, a static version of the Scopus database from November 1, 2017, covering the period 2007-2016 inclusive was aggregated by institution, country, region, and subject. This means we are analysing Scopus content as it was on November 11, 2017. Results obtained using Scopus.com are up to date as of the date of query and may, therefore, differ slightly from the results presented in this report.

When aggregating article and citation counts, an integer counting method was employed where, for example, a paper with two authors from a United States address and one from a United Kingdom address would be counted as one article for each country (i.e. 1 United States and 1 United Kingdom). This method was favoured over fractional counting, in which the above paper would count as 0.67 for the United States and 0.33 for the United Kingdom, to maintain consistency with other reports (both public and private) we have conducted on the topic.

²⁹ Cronin, B. (2005). A hundred million acts of whimsy? *Current Science*, 89(9), 1505-1509. Retrieved from http://www.currentscience.ac.in/Downloads/article_id_089_09_1505_1509_0.pdf; Bornmann, L., & Daniel, H.-D. (2008). What do citation counts measure? A review of studies on citing behavior. *Journal of Documentation*, 64(1), 45-80. doi:10.1108/00220410810844150

³⁰ Kurtz, M. J., & Bollen, J. (2010). Usage bibliometrics. *Annual Review of Information Science and Technology*, 44(1), 1-64. doi:10.1002/aris.2010.1440440108

³¹ Moed, H. F. (2005). Statistical relationships between downloads and citations at the level of individual documents within a single journal. *Journal of the American Society for Information Science and Technology*, 56(10), 1088-1097. doi:10.1002/asi.20200; Schloegl, C., & Gorraiz, J. (2010). Comparison of citation and usage indicators: the case of oncology journals. *Scientometrics*, 82(3), 567-580. doi:10.1007/s11192-010-0172-1; Schloegl, C., & Gorraiz, J. (2011). Global usage versus global citation metrics: The case of pharmacology journals. *Journal of the American Society for Information Science and Technology*, 62(1), 161-170. doi:10.1002/asi.21420

A body of literature is available on the limitations and caveats in the use of such 'bibliometric' data, such as the accumulation of citations over time, the skewed distribution of citations across articles, and differences in publication and citation practices between fields of research, different languages, and applicability to social sciences and humanities research. In social sciences and humanities, the bibliometric indicators presented in this report for these fields must be interpreted with caution because a reasonable proportion of research outputs in such fields take the form of books, monographs and non-textual media. As such, analyses of journal articles, their usage and citation, provides a less comprehensive view than in other fields, where journal article comprise the vast majority of research outputs.

ScienceDirect is a leading full-text articles and books scientific platform. With an invaluable and incomparable customer base, the use of scientific research on ScienceDirect.com provides a different type of performance measurement. ScienceDirect.com is used by more than 12,000 institutions worldwide, with more than 15 million active users and over 700 million full text article downloads in 2012. The average click through to full-text per month is 60 million. ScienceDirect covers over 10,500 books going back as far as 1993. The full-text article download metrics based on the large number of users in ScienceDirect.com provide a new dimension into measuring research impact on areas such as education and industrial sector by indicating what articles are requesting now and therefore can be a leading (future) indication of citation behaviour.

LexisNexis® is a leader in comprehensive and authoritative legal, news and business information and tailored applications. LexisNexis® is a member of Reed Elsevier Group plc. Patents are obtained via a partnership with LexisNexis and include over 96 million records from over 100 patent authorities, including those from the United States Patent and Trademark Office (USPTO), the European Patent Office (EPO), the Japanese Patent Office (JPO), the Patent Cooperation Treaty (PCT) of the World Intellectual Property Organization (WIPO) and the UK Intellectual Property Office (UKIPO). The patent database will be particularly useful in establishing trends in research and technology development providing downstream indicators of outputs from the research base. Patent coverage per patent office: UKIPO from 1916 (pre-grants), USPTO from 1,790 (grants and pre-grants), EPO from 1,978 (grants and pre-grants), WIPO from 1,978 (pre-grants), and JPO from 1976 (pre-grants).

Appendix B

Methodology for defining the SDGs

Query methodology

Query terms to search for the SDGs are an important step in identifying scientific production on the subject. The UDEP team and Elsevier worked on the identification of relevant query terms to identify scientific literature on SDGs for three months, in an iterative process. Although we tried to be as accurate as possible, it has to be acknowledged that the searches are only approximations because sustainable development is not a disciplinary subject but a set of interrelated issues for which there is not a consistent taxonomy or thesaurus at the moment. This effort, however, is a contribution to other studies that want to build on it to advance on the identification of scientific literature and other types of knowledge on sustainable development and the SDGs. The methodology is the following:

1. Elsevier provided UDEP with a list of query terms that were collected for their study on the 17 SDGs.
 - These query terms based on the previously vetted and established query terms used to define the 6 themes of the Sustainability Science in the report Sustainability Science in a Global Landscape. The query terms used for each of these 6 themes were selected by the input of experts and the methodology is described in detail starting from page 16 of the report, Sustainability Science in a Global Landscape. Appendix A of the report lists the experts involved in defining the original keyword list. To generate the query terms for the 17 SDGs, the terms from the 6 sustainability themes were mapped to the 17 SDGs.
 - Additional query terms were extracted from the sustainable development knowledge platform.
 - The complete set of query terms were used to extract Scopus-indexed articles. Data from this search was then provided to internal and external experts for validation. The data provided to the experts was as follows:
 - i. A list of 2000 articles (titles, bibliographic information, and abstracts) retrieved by the search
 - ii. Aggregate data about the keyword search results including most frequent query terms represented by the publication set, top authors in the field, subject areas represented by the publications.
 - iii. The internal experts used the data from i. and ii. to validate the query. This step was repeated until a consensus was achieved.
2. The UDEP team added to the query terms provided by Elsevier by identifying additional terms via literature review of handbooks on different sustainability subjects edited by recognised publishing houses. Their glossaries were used as a first database of terms but they were further refined by consulting experts in the field. This refinement was led by heads of National Research Councils.
3. The refined database was used to build search queries for Scopus, and Elsevier's Analytical Services team performed test searches. The results were examined by UDEP's team to find false positives, identify relevant subject areas and discard others. A set of 2000 papers (titles and abstracts) per SDG was revised by UDEP and adjustments were made.
4. The queries presented herein are the query terms that were used for this report, following validation by UDEP.

The table below provides a list of sources used by UDEP for the selection of query terms to search for literature on SDGs.

Type	Source
Bibliographic reference	Ben-Aryeh, A., Frønes, I., Casas, F., & Korbin, J. E. (Eds.). (2014). <i>Handbook of child well-being: Theories, methods and policies in global perspective</i> (pp. 1-27). New York, NY, USA: Springer.
Bibliographic reference	Colciencias, IDEAM, PNUD, MADS, DNP, Cancillería, Observatorio de Ciencia y Tecnología (2016). <i>Tercera comunicación nacional de cambio climático. "cienciometría del cambio climático en colombia"</i> . http://observatorio.epacartagena.gov.co/ftp-uploads/pub-cienciometria-cambio-climatico.pdf
Bibliographic reference	Davis, K., Evans, M., & Lorber, J. (Eds.). (2006). <i>Handbook of gender and women's studies</i> . Sage.
Bibliographic reference	Elsevier and Scidev (2015). <i>The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development</i> . https://www.elsevier.com/_data/assets/pdf_file/0018/119061/SustainabilityScienceReport-Web.pdf
Bibliographic reference	Galarraga, I., González-Eguino, M., & Markandya, A. (Eds.). (2011). <i>Handbook of sustainable energy</i> . Edward Elgar Publishing.
Bibliographic reference	<i>Handbook of Agricultural Economics Science direct</i>
Bibliographic reference	Hanushek, E. A., Machin, S. J., & Woessmann, L. (Eds.). (2016). <i>Handbook of the Economics of Education</i> . Elsevier.
Bibliographic reference	Hassan, S. U., Haddawy, P., & Zhu, J. (2014). A bibliometric study of the world's research activity in sustainable development and its sub-areas using scientific literature. <i>Scientometrics</i> , 99(2), 549-579.
Bibliographic reference	Haughton, Jonathan; Khandker, Shahidur R.. 2009. <i>Handbook on poverty and inequality</i> (English). Washington, DC: World Bank. http://documents.worldbank.org/curated/en/488081468157174849/Handbook-on-poverty-and-inequality
Bibliographic reference	Herring, R. J. (Ed.). (2015). <i>The Oxford Handbook of Food, Politics, and Society</i> . Oxford Handbooks.
Bibliographic reference	INEE (2012). <i>Minimum Standards for Education: preparedness, response, recovery</i> . http://s3.amazonaws.com/inee-assets/resources/INEE_Minimum_Standards_Handbook_2010_English.pdf
Bibliographic reference	ONU Colombia. (2015). <i>1er Reporte sobre el estado de las ciudades de Colombia: camino hacia la prosperidad urbana</i> . Bogotá. Recuperado el, 24(08), 2016.
Bibliographic reference	Potschin, M., & Haines-Young, R. (2006). "Rio+ 10", sustainability science and Landscape Ecology. <i>Landscape and urban planning</i> , 75(3-4), 162-174.
Bibliographic reference	Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. <i>Annual review of psychology</i> , 52(1), 141-166.
Bibliographic reference	Sawin, J. L., Sverrisson, F., Seyboth, K., Adib, R., Murdock, H. E., Lins, C., ... & Satzinger, K. (2013). <i>Renewables 2017 Global Status Report</i> .
Database	OECD Indicators
Database	SDG Mapping universities - http://ap-unsdsn.org/wp-content/uploads/2017/04/Compiled-Query-terms-for-SDG-Mapping_Final_17-05-10.xlsx
Expert committee	PNCTel Ambiente, biodiversidad y hábitat Colciencias
Expert committee	PNCTel Mar y Recursos Hidrobiológicos Colciencias
Expert committee	PN de Biotecnología Colciencias
Expert Committee	Quality Assurance in Higher Education
Expert Committee	Taxonomy ACM Plan Estratégico TIC
Expert Committee	UDEP Colciencias
Website	La iniciativa de los ODS y las ciudades prosperas Onu Habitat: http://cpi.unhabitat.org/
Website	UNCTAD
Website	WEB UN.org

Website	WEB unctad.org
Website	WEB who.int

The section below includes the queries used for the analysis.

SDG 1 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("absolute poverty lines" OR "additive poverty measures" OR "basic public services" OR "benefit incidence analysis" OR "benefits to poor" OR "causes of poverty" OR "child lab*" OR "child labor" OR "child labour" OR "chronic poverty" OR "commitment to basic income" OR "community-level characteristics associated with poverty" OR "consumer price index" OR "consumption expenditure" OR "consumption of calories" OR "cost of basic needs method" OR "current consumption expenditure deficit" OR "DCI method" OR "deflation problem" OR "demographic characteristics associated with poverty" OR "dependency ratio" OR "determinants of poverty" OR "development aid" OR "development cooperation on poverty" OR "direct caloric intake method" OR "disaster mortality" OR "disaster related economic loss" OR "distributional effect" OR "drinking water and poverty" OR "durable goods" OR "economic characteristics associated with poverty" OR "economic indicators" OR "economic resource" OR "economically disadvantaged" OR "education spending" OR "elasticity of poverty" OR "Encuesta de Desarrollo Social" OR "Encuesta sobre el Nivel de Vida" OR "end poverty" OR "energy poverty" OR "equal rights to economic resources" OR "expenditure progressivity" OR "extreme poverty" OR "financ*" OR "financial crisis" OR "financial inclusion" OR "food and nutrition" OR "food bank" OR "food banks" OR "food consumption" OR "food energy intake" OR "frameworks for analysing poverty" OR "gender and poverty" OR "gender-sensitive poverty reduction policies" OR "geography and poverty" OR "gini coefficient" OR "goods coverage index" OR "growth incidence curve" OR "headcount index or ratio" OR "health spending" OR "household and individual level indicators" OR "household budget survey" OR "income equality" OR "income inequality" OR "income security" OR "income shock" OR "inequality measures" OR "inflation as related to poverty" OR "informality" OR "international poverty comparisons" OR "investment in poverty eradication" OR "land ownership" OR "land tenure" OR "living standard indicators" OR "living standards measurement study" OR "lsms" OR "lorenz curve" OR "losses and damage from disasters" OR "measurement of poverty" OR "microfinanc*" OR "monitoring and evaluation of poverty" OR "participatory poverty assessments" OR "per capita consumption" OR "per household consumption" OR "poverty alleviation" OR "poverty and empowerment" OR "poverty and innovation" OR "poverty and technology" OR "poverty deficit curve" OR "poverty determinant" OR "poverty gap index" OR "poverty incidence curve" OR "poverty income*" OR "poverty index" OR "poverty line" OR "poverty profiles" OR "poverty rates" OR "poverty resilience" OR "pro-poor" OR "purchasing power parity" OR "reduction of poverty" OR "regressive tax" OR "relative poverty risks" OR "resilien* and po*" OR "resilience of the po*" OR "right to land" OR "rural finance" OR "safety net" OR "safety nets" OR "sanitation and poverty" OR "small farmer" OR "smallholder" OR "social exclusion" OR "social inequality" OR "social protection systems" OR "social protection" OR "software adept" OR "stochastic poverty" OR "sustainable development goal 1" OR "underemployment" OR "unemployment" OR "unmet basic needs" OR "vulnerability" OR "watts index" OR "watts poverty index" OR "wealth distribution")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND (SUBJAREA("SOCI ") OR SUBJAREA(" ENVI ") OR SUBJAREA(" BUSI ") OR SUBJAREA(" AGRI ") OR SUBJAREA(" ENGI ") OR SUBJAREA(" MEDI ") OR SUBJAREA(" ECON ") OR SUBJAREA(" ENER ") OR SUBJAREA(" EART ") OR SUBJAREA(" COMP ") OR SUBJAREA(" DECI ") OR SUBJAREA(" ARTS ") OR SUBJAREA(" BIOC ") OR SUBJAREA(" NURS ") OR SUBJAREA(" MATH ") OR SUBJAREA(" PSYC ") OR SUBJAREA(" CENG ") OR SUBJAREA(" MULT ") OR SUBJAREA(" MATE ") OR SUBJAREA(" IMMU ")))

SDG 2 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("access to nutritious food" OR "access to safe food" OR "access to sufficient food" OR "act on organic farming" OR "agra initiative" OR "agrarian economics" OR "agricultur*" OR "agricultural biodiversity" OR "agricultural development strategies" OR "agricultural development" OR "agricultural economics" OR "agricultural orientation index" OR "agricultural production" OR "agricultural productivity improvement" OR "agricultural sustainability" OR "agricultural technology" OR "agriculture and climate change" OR "agriculture and local ecological knowledge" OR "agriculture and local knowledge" OR "agriculture and ownership" OR "agriculture reforms" OR "agriculture" OR "agrifood industry" OR "agrobiodiversity" OR "agroecological intensification" OR "agroecology" OR "agronomic traits" OR "alternative agriculture" OR "anaemia" OR "anemia" OR "anti-gmo activism" OR "antinutrients" OR "biofortification" OR "biofuels vs food production" OR "biopesticides" OR "cartagena protocol on biosafety" OR "cash & carry chains" OR "cash and carry chains" OR "cash-crop export farming" OR "CGIAR" OR "children underweight" OR "climate friendly agriculture" OR "codex alimentarius" OR "commission on plant genetic resources for food and agriculture" OR "community supported agriculture" OR "conservation agriculture" OR "conservation of genetic diversity/biodiversity of cultivated plants" OR "conservation of genetic diversity/biodiversity of farmed animals" OR "conservation of genetic diversity/biodiversity of seeds" OR "consultative group on international agricultural research" OR "convention on biological diversity" OR "conventional farming system" OR "counter cuisine"

SDG 3 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("access to safe medicines" OR "acculturative stress" OR "adjusted life year" OR "adjusted life years" OR "adolescent health" OR "affordable medicines" OR "affordable vaccines" OR "aids"

SDG 4 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("access to education" OR "access to quality higher education" OR "accountability and education" OR "accountable education" OR "accreditation and education" OR "active learning" OR "admission, enrolment and retention" OR "adult learners" OR "affordable higher education" OR "armed conflict and education" OR "autonomy and education" OR "child-friendly schools" OR "child-friendly spaces and schools" OR "class size" OR "class-based learning hybrid learning" OR "class-based learning" OR "classroom management" OR "cognitive processes" OR "community education committees" OR "community education" OR "consistency and education" OR "continous improvement and education" OR "continuity of education" OR "core competencies" OR "cost effective education" OR "curricula and content" OR "curricula" OR "design and maintenance of learning spaces" OR "digital learning" OR "disability and education" OR "disasters and education" OR "distance to school" OR "early childhood development" OR "early childhood education" OR "education access" OR "education and

conflict mitigation" OR "education and corruption" OR "education and diversity" OR "education and humanitarian response" OR
 "education attainment" OR "education capacity" OR "education enrollment" OR "education enrolment" OR "education ethics" OR
 "education for cultural diversity" OR "education for gender equality" OR "education for global citizenship" OR "education for health
 and nutrition" OR "education for human rights" OR "education for peace" OR "education for refugees" OR "education for
 sustainability" OR "education for sustainable development" OR "education in emergencies" OR "education internally displaced
 persons" OR "education law and policy formulation" OR "education needs" OR "education policy" OR "education quality" OR
 "education relevance" OR "education rights and goals" OR "educational access" OR "educational resource" OR "educational
 resources" OR "effective learning environments" OR "efficiency and education" OR "e-learning" OR "equitable basic education" OR
 "equitable education" OR "excellence and education" OR "experience and qualifications" OR "female education" OR "fitness for
 purpose and education" OR "formal learning" OR "formal training" OR "free basic education" OR "further education" OR "gender and
 education" OR "gender balance" OR "girls education" OR "girls' education" OR "high academic standards and education" OR "higher
 education" OR "highschool" OR "highschools" OR "immediate education priorities" OR "inclusive education" OR "increasing student
 enrollments" OR "informal education" OR "informal learning" OR "informal training" OR "instructional materials" OR "learning
 environment" OR "learning environments" OR "learning material" OR "learning materials" OR "learning opportunity" OR "learning
 outcome" OR "learning outcomes" OR "learning site distance" OR "learning sites" OR "learning spaces" OR "learning spaces" OR
 "lifelong learning" OR "literacy" OR "local education action plans" OR "massification and education" OR "m-learning" OR "national
 and local education plans" OR "non formal education" OR "non-violent classroom management" OR "numeracy" OR "parental
 education" OR "participatory learning" OR "performance appraisals" OR "planning and implementation" OR "poverty and education"
 OR "practical learning" OR "primary education" OR "primary school" OR "primary schools" OR "purposeful education" OR "qualified
 teachers" OR "quality assurance and education" OR "quality basic education" OR "quality education" OR "quality education" OR
 "quality enhancement and education" OR "quality of education" OR "quality preprimary education" OR "recruitment and selection
 of teachers" OR "reduce gender disparities in education" OR "refugees and learning" OR "relevance of education" OR "relevant
 education" OR "right to education" OR "safety in school" OR "scholarships for developing countries for higher education" OR "school
 attendance" OR "school discrimination" OR "school distance" OR "school distress" OR "school enrollment" OR "school enrolment
 rate" OR "school enrolment" OR "school fee" OR "school fees" OR "school safety" OR "schooling" OR "secondary education" OR
 "secondary school" OR "secondary schools" OR "sexuality education" OR "skills for employment" OR "skills for work" OR "student-
 focused learning" OR "students support and coordination" OR "students support and supervision" OR "teacher compensation" OR
 "teacher qualification" OR "teacher training" OR "teaching methods" OR "technical training" OR "tertiary education" OR
 "transformative learning" OR "universal access to education" OR "upgrade education facilities" OR "value-added education" OR
 "vocational training" OR "women education" OR "women's education")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND (SUBJAREA(" SOCI ") OR SUBJAREA(" ARTS ") OR SUBJAREA(" PSYC ") OR SUBJAREA(" NURS "))

SDG 5 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("aboriginal women" OR "abortion in women" OR "academic
 feminism" OR "academics feminists" OR "access to child care" OR "androcentrism" OR "antimen" OR "anti-men" OR "antiwomen"
 OR "anti-women" OR "approach to gender" OR "autonomous women's groups" OR "autonomy of academic feminism" OR "biological
 sex differences" OR "black feminism" OR "black women's cultural production" OR "boys' access to justice" OR "boys' education" OR
 "bulimia nervosa" OR "changing patterns of family" OR "child custody" OR "child marriage" OR "child marriages" OR "civil
 partnership" OR "civil partnerships" OR "crisis in masculinity" OR "defining women" OR "diversity of family" OR "divorce right" OR
 "divorce rights" OR "domestic violence women" OR "early marriage" OR "early marriages" OR "eating disorders" OR "ecofeminism"
 OR "emancipation of women by war" OR "employment equity" OR "employment inequalities" OR "empower*" OR "families of choice"
 OR "family and masculinity" OR "family and women's employment" OR "family friendly employment policies" OR "family planning"
 OR "family structure" OR "family structures" OR "female education" OR "female employment" OR "female genital cutting" OR
 "female genital mutilation" OR "female infanticide" OR "female infanticides" OR "female labor force participation" OR "female labour
 force participation" OR "female leadership" OR "female political participation" OR "female unemployment" OR "feminine gender
 norms" OR "femininity" OR "feminism and state" OR "feminism" OR "feminist consciousness-raising" OR "feminist critiques of
 religion" OR "feminist critiques" OR "feminist empiricism" OR "feminist environmental studies" OR "feminist environmentalism" OR
 "feminist epistemology" OR "feminist ethics" OR "feminist ethnography" OR "feminist history" OR "feminist knowledge" OR "feminist
 methodology wars" OR "feminist philosophy" OR "feminist political practice" OR "feminist political strategies" OR "feminist political
 theory" OR "feminist politics of location" OR "feminist postmodern epistemologies" OR "feminist research" OR "feminist spirituality
 movement" OR "feminist standpoint theories" OR "feminist study of bodies" OR "feminist study of care" OR "feminist study of
 citizenship" OR "feminist study of friendship" OR "feminist study of men" OR "feminist study of nationalism" OR "feminist study of
 religion" OR "feminist study of science and technology" OR "feminist study of women and nature" OR "feminist theory" OR
 "feminization of labour market" OR "feminization of poverty" OR "femocrats" OR "fetal rights" OR "focus of feminist study" OR
 "forced marriage" OR "forced marriages" OR "forced prostitution" OR "fragile families and child" OR "gay marriage" OR "gay men"

OR "gay studies" OR "gender activism" OR "gender and development" OR "gender difference" OR "gender displays" OR "gender distinction" OR "gender equality policy" OR "gender equality" OR "gender hierarchies" OR "gender identity" OR "gender impact assessment studies" OR "gender inequality" OR "gender labour force" OR "gender mainstreaming, in environmental studies" OR "gender moral conservatism" OR "gender moral development" OR "gender moral epistemology" OR "gender moral motherhood" OR "gender moral panics" OR "gender moral psychology" OR "gender moral rationalities" OR "gender moral repair" OR "gender norms" OR "gender obesity" OR "gender occupational segregation" OR "gender oppression" OR "gender relations with technoscience" OR "gender relations, and violent conflict" OR "gender relationship with culture" OR "gender revolution" OR "gender roles" OR "gender studies" OR "gender" OR "gendered assumptions" OR "gendered social order" OR "gene modification technology" OR "genital surgery" OR "genus studies" OR "girls' access to justice" OR "girls' education" OR "global campaign for women's human rights" OR "global context of feminism" OR "global crisis of masculinity" OR "global perspective in feminism" OR "grounded feminist knowledge" OR "heteronormativity" OR "heterorelationality" OR "heterosexual couples, gender convergence" OR "heterosexuality" OR "homosexuality" OR "honor killing" OR "honor killings" OR "honour killing" OR "honour killings" OR "hormone replacement therapy" OR "household technologies" OR "human fertility" OR "human hermaphroditism" OR "human infertility" OR "human intersexuality" OR "hybridized identities" OR "institutionalization of feminism" OR "international concern with masculinities" OR "international women's movement" OR "intra-household allocation" OR "legal system, and feminism" OR "leisure, and masculinity" OR "lesbian cultural production" OR "lesbian families" OR "lesbian friendship networks" OR "lesbian identity" OR "lesbian marriage" OR "lesbian pupils and parents" OR "lesbian sex wars" OR "lesbian studies" OR "lesbianism" OR "liberal feminism" OR "liberal-rights tradition" OR "location, of feminist study" OR "male culture" OR "male education" OR "male employment" OR "male gender norms and" OR "male genital cutting" OR "male genital mutilation" OR "male labor force participation" OR "male labour force participation" OR "male leadership" OR "male political participation" OR "male sex role" OR "male unemployment" OR "man victims of sexual violence" OR "marxist feminism" OR "masculine gender norms" OR "masculine identities" OR "masculine, challenging" OR "masculinities and policy" OR "masculinities" OR "masculinity in crisis" OR "masculinity studies" OR "masculinity" OR "materiality of sex" OR "maternal mortality" OR "maternal thinking" OR "men in leadership" OR "men labor force participation" OR "men labour force participation" OR "men violence" OR "men's education" OR "men's political participation" OR "men's unemployment" OR "men's health" OR "men's studies" OR "mens' employment" OR "misandry" OR "misogyny" OR "objectification of women" OR "patriarchal dividend" OR "patriarchy" OR "post-feminist cultural production" OR "post-heterorelational friendship" OR "pragmatism, in feminist epistemology" OR "pragmatist-feminist" OR "pregnan*" OR "pre-menstrual syndrome" OR "radical feminism" OR "radicalesbians" OR "reproductive health" OR "reproductive rights of women" OR "reproductive rights" OR "reproductive technologies" OR "role in household labour" OR "same sex marriage" OR "same sex marriages" OR "same-sex couples" OR "same-sex marriage" OR "same-sex marriages" OR "sex change procedures" OR "sex differences sex hormones" OR "sex differences" OR "sex roles" OR "sex traffic" OR "sexual behaviour" OR "sexual health" OR "sexual identity" OR "sexual rights" OR "sexual violence in war" OR "sexual violence" OR "single parents" OR "single-parent families" OR "single-parent poverty" OR "social construction perspective on gender" OR "social policy familialism" OR "socialist feminism" OR "structural barriers to women's employment" OR "study of men and masculinities" OR "subjugated knowledges" OR "third world feminists" OR "transgender studies" OR "transgender" OR "transgendering" OR "transnational feminism" OR "transsexualism" OR "unequal pay" OR "unequal salary" OR "unpaid care work" OR "unpaid work" OR "victimization of women in war" OR "victims of sexual violence" OR "violence girl*" OR "wage differential" OR "western approach to difference" OR "western feminism" OR "woman equality" OR "woman participants in conflict" OR "woman suffrage movement" OR "woman victims of violence" OR "woman vulnerability" OR "woman" OR "woman's suicide" OR "woman's voice, and citizenship" OR "women and development" OR "women care workers" OR "women in leadership" OR "women in management" OR "women labor force participation" OR "women labour force participation" OR "women religious leaders" OR "women scientists" OR "women" OR "women, environment and development" OR "women's education" OR "women's political participation" OR "women's rights" OR "women's unemployment" OR "women's access to justice" OR "women's bodies" OR "women's commissions" OR "women's environment and development organization" OR "women's movements" OR "women's organizations" OR "women's peace movement" OR "women's shared" OR "women's spirituality" OR "womens' employment")) AND (DOCTYPE("ar") OR DOCTYPE("cp") OR DOCTYPE("re")) AND (SUBJAREA("SOCI") OR SUBJAREA("MEDI") OR SUBJAREA("AGRI") OR SUBJAREA("ENVI") OR SUBJAREA("BUSI") OR SUBJAREA("ENGI") OR SUBJAREA("ECON") OR SUBJAREA("BIOC") OR SUBJAREA("ARTS") OR SUBJAREA("COMP") OR SUBJAREA("NURS") OR SUBJAREA("EART") OR SUBJAREA("PSYC") OR SUBJAREA("IMMU") OR SUBJAREA("DECI") OR SUBJAREA("HEAL") OR SUBJAREA("CENG") OR SUBJAREA("MULT") OR SUBJAREA("PHAR") OR SUBJAREA("MATE") OR SUBJAREA("CHEM") OR SUBJAREA("NEUR") OR SUBJAREA("DENT"))

SDG 6 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("access to water" OR "Acute diarrheal disease" OR "antifouling membrane" OR "anti-fouling membrane" OR "antifouling membranes" OR "anti-fouling membranes" OR "aquatic ecotoxicology" OR "aquatic toxicology" OR "Aquifers and water" OR "Badlands and water" OR "biosphere's reserve" OR "black

water" OR "blue water footprint" OR "blue water" OR "brominated flame retardants" OR "cholera" OR "clean water" OR "clofibric acid" OR "constructed wetlands" OR "denitrification" OR "desertification" OR "domestic wastewater" OR "drinking water treatment" OR "drinking water" OR "drought avoidance" OR "drought resistance" OR "drought stress" OR "drought tolerance" OR "drought" OR "dysentery" OR "Ecosystems and water" OR "endocrine disruptor" OR "Equitable access to sanitation" OR "eutrophication" OR "flocculation" OR "flood control" OR "flood damage" OR "flood defence" OR "flood forecasting" OR "flood hazard management" OR "flood management" OR "flood risk" OR "flood simulation modelling" OR "flood warning" OR "flooding tolerance" OR "floodplain geomorphology" OR "floodplain restoration" OR "floods monitoring" OR "Forests and water" OR "free water" OR "freshwater" OR "green water footprint" OR "green water" OR "grey water footprint" OR "grey water" OR "groundwater contamination" OR "groundwater flow" OR "groundwater management" OR "groundwater quality" OR "groundwater recharge" OR "groundwater" OR "hygienic toilet" OR "hygienic toilets" OR "infiltration based storm water management" OR "integrated water resources management" OR "integrated watershed management" OR "integrated watershed modelling" OR "leached" OR "malaria" OR "membrane bioreactor" OR "membrane filtration" OR "membrane fouling" OR "microfiltration" OR "microplastic*" OR "microplastic*" OR "municipal wastewater" OR "nanofiltration" OR "nitrogen removal" OR "nutrient removal" OR "optimal water use" OR "palmer drought severity index" OR "pesticide" OR "pharmaceutical" OR "pharmaceuticals" OR "phosphorus removal" OR "pollution" OR "polycyclic aromatic hydrocarbons" OR "potable water" OR "rainwater harvesting" OR "reverse osmosis" OR "river basin management" OR "river restoration" OR "river" OR "rural water supply" OR "sanitation and water conservation" OR "Sanitation and water" OR "sanitation" OR "seawater intrusion" OR "sequencing batch reactor" OR "sewage sludge" OR "sewer*" OR "shared water" OR "soil and water conservation" OR "storage aquifers" OR "stormwater management" OR "structuration" OR "submarine groundwater discharge" OR "surface water" OR "textile wastewater" OR "typhoid" OR "ultrafiltration" OR "underground dams" OR "underground water" OR "urban floods" OR "urban water" OR "virtual water" OR "waste water treatment" OR "waste water" OR "wastewater management" OR "wastewater reuse" OR "wastewater treatment plant" OR "wastewater treatment plants" OR "wastewater treatment" OR "wastewater" OR "wastewaters" OR "water and sanitation" OR "water availability" OR "water balance" OR "water borne disease" OR "water borne diseases" OR "water conservation" OR "water contaminant" OR "water contaminant" OR "water contaminants" OR "water contamination" OR "water contamination" OR "water costs" OR "water deficit" OR "water demand" OR "water eco-system*" OR "water ecotoxicology" OR "water efficient maize for africa (wema)" OR "water filters" OR "water footprint" OR "water framework directive" OR "water grabbing" OR "water infrastructure" OR "water inventory" OR "water logging" OR "water loss" OR "water management" OR "water policy" OR "water pollutant" OR "water pollutants" OR "water pollution" OR "water pricing" OR "water productivity" OR "water purification" OR "Water purification" OR "water quality index" OR "water quality" OR "Water quality" OR "water recycling" OR "water resource management" OR "water resource" OR "water resources depletion" OR "water resources development" OR "water resources management" OR "water resources" OR "water reuse" OR "water reuse" OR "water rights" OR "water security" OR "water shortage" OR "water shortage" OR "water stress" OR "water stressed countries" OR "water supplies" OR "water supply" OR "water toxicology" OR "water treatment" OR "water use efficiency" OR "water use" OR "water uses" OR "water" OR "water-borne disease" OR "water-borne diseases" OR "watershed management")) AND (DOCTYPE(" ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND (SUBJAREA(" ENVI ") OR SUBJAREA(" ENGI ") OR SUBJAREA(" AGRI ") OR SUBJAREA(" ENER ") OR SUBJAREA(" SOCI ") OR SUBJAREA(" EART ") OR SUBJAREA(" CENG ") OR SUBJAREA(" CHEM ") OR SUBJAREA(" MATE ") OR SUBJAREA(" MEDI ") OR SUBJAREA(" BIOC ") OR SUBJAREA(" COMP ") OR SUBJAREA(" BUSI ") OR SUBJAREA(" PHYS ") OR SUBJAREA(" ECON ") OR SUBJAREA(" IMMU ") OR SUBJAREA(" PHAR ") OR SUBJAREA(" MATH ") OR SUBJAREA(" MULT ") OR SUBJAREA(" DECI ") OR SUBJAREA(" ARTS ") OR SUBJAREA(" VETE ") OR SUBJAREA(" NURS ") OR SUBJAREA(" HEAL "))

SDG 7 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("access to energy" OR "alkaline" OR "Alternative energy" OR "Biodegradable Energy" OR "bioenergy" OR "biofuel" OR "BIOFUEL" OR "biofuels" OR "biofuels" OR "biogas" OR "biomass energy" OR "biomass" OR "cooling component" OR "cooling device" OR "cooling equipment" OR "dams" OR "demand-side management" OR "direct methanol" OR "district heat" OR "district heating" OR "dye sensitized" OR "dye-sensitized solar cell" OR "electric vehicle" OR "electric vehicles" OR "electricity generation" OR "electrochemical and energy and system" OR "electromagnetic pollution" OR "energiewende" OR "energy conversion efficiency" OR "energy costs" OR "energy distributed generation" OR "energy efficiency" OR "Energy infrastructure" OR "energy management" OR "energy storage" OR "enhanced geothermal system" OR "enhanced geothermal systems" OR "geothermal energy" OR "geothermal heat pump" OR "geothermal heat pumps" OR "geothermal heating" OR "geothermal power generation" OR "geothermal power plant" OR "geothermal power" OR "geothermics" OR "ground source heat pump geothermal" OR "ground-coupled heat" OR "heating component" OR "heating device" OR "heating equipment" OR "high voltage direct current transmission" OR "HVDC transmission" OR "hybrid vehicles" OR "hydraulic energy" OR "hydraulic microcentrals" OR "hydrogen and powered and engines" OR "hydropower" OR "life cycle assessment" OR "life cycle assessments" OR "life-cycle assessment" OR "life-cycle assessments" OR "lithium-ion batteries" OR "lithium-ion battery" OR "micro grid" OR "microbial fuel cell" OR "mineral carbon" OR "Non-polluting energies" OR "nuclear energy"

OR "ocean energy." OR "offshore wind energy" OR "organic photovoltaic" OR "organic photovoltaics" OR "organic photovoltaics" OR "organic solar cell" OR "organic solar cells" OR "organic solar cells" OR "phosphoric acid or molten carbonate or solid oxide" OR "photovoltaic cell" OR "photovoltaic cells" OR "photovoltaic power systems" OR "photovoltaic" OR "photovoltaics" OR "polymer electrolyte membrane" OR "Radiation" OR "renewable energies" OR "renewable energy and integration" OR "renewable energy and source" OR "renewable energy systems" OR "renewable energy technologies" OR "renewable energy" OR "Renewable energy" OR "Renewable energy" OR "renewables" OR "reversible and fuel cell" OR "smart grid technology" OR "smart grid" OR "smart grids" OR "smart meter" OR "smart meters" OR "smart micro grid" OR "smart micro grids" OR "smart microgrid" OR "smart micro-grid" OR "smart microgrids" OR "smart micro-grids" OR "solar cell" OR "solar cells" OR "solar collect" OR "solar collector" OR "solar energy" OR "solar energy" OR "solar energy" OR "syngas and biomass" OR "system wecs" OR "waste conversion" OR "water energy" OR "wave energy" OR "wind energy conversion system" OR "wind energy generation" OR "wind energy potential" OR "wind energy" OR "wind energy" OR "wind farm" OR "wind park" OR "wind power generation" OR "wind power plant" OR "wind power" OR "wind power" OR "wind turbine" OR "wind turbines")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND (SUBJAREA("ENER") OR SUBJAREA("ENGI") OR SUBJAREA("ENVI") OR SUBJAREA("COMP") OR SUBJAREA("SOCI") OR SUBJAREA("CENG ") OR SUBJAREA(" AGRI ") OR SUBJAREA(" MATE ") OR SUBJAREA(" CHEM ") OR SUBJAREA(" BUSI ") OR SUBJAREA(" BIOC ") OR SUBJAREA(" PHYS ") OR SUBJAREA(" EART ") OR SUBJAREA(" MATH ") OR SUBJAREA(" ECON ") OR SUBJAREA(" DECI ") OR SUBJAREA(" IMMU ") OR SUBJAREA(" MULT ") OR SUBJAREA(" ARTS ") OR SUBJAREA(" PHAR ") OR SUBJAREA(" HEAL ") OR SUBJAREA(" NEUR "))

SDG 8 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND "carbon offset" OR "carbon offsets" OR "carbon offsetting" OR "child lab*" OR "Child labour" OR "child soldier" OR "circular economy" OR "decent job" OR "decent jobs" OR "decent work" OR "Demographic bonus" OR "economic development" OR "economic geography" OR "economic growth" OR "economic policies" OR "economic policy" OR "economic productivity" OR "employment protection" OR "forced lab" OR "forced labour" OR "formalization" OR "full employment" OR "global jobs" OR "human trafficking" OR "inclusive economy" OR "inclusive growth" OR "income group" OR "income groups" OR "industrial development" OR "informal economy" OR "informal employment" OR "informal sector" OR "informal sector" OR "informal sectors" OR "informal" OR "innovation and unemployment" OR "job creation" OR "lab market institution" OR "lab market institutions" OR "lab right" OR "lab rights" OR "labour intensive" OR "labour market institution" OR "labour market institutions" OR "labour right" OR "labour rights" OR "labour-intensive" OR "living wage" OR "local investment" OR "local investments" OR "low carbon economy" OR "low-carbon economy" OR "medium enterprise" OR "medium enterprises" OR "medium entrepreneur" OR "medium entrepreneurs" OR "microcredit*" OR "micro-credit*" OR "microenterprise*" OR "micro-enterprise*" OR "microfinanc*" OR "micro-financ*" OR "migrant workers" OR "minimum wage" OR "modern slavery" OR "offset project" OR "offset projects" OR "precarious employment" OR "precarious job" OR "precarious jobs" OR "productive development" OR "productive employment" OR "productive sophistication" OR "prosperity" OR "quality job" OR "quality jobs" OR "rural economy" OR "small enterprise" OR "small enterprises" OR "small entrepreneur" OR "small entrepreneurs" OR "social entrepreneurship" OR "starting entrepreneur" OR "starting entrepreneurs" OR "structural change" OR "sustainable tourism" OR "taxes" OR "technological upgrading" OR "trade support" OR "trade union" OR "trade unions" OR "unemploy* youth" OR "unemployment" OR "unequal pay" OR "working environment" OR "working environments" OR "working policy" OR "youth employ*")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND (SUBJAREA("SOCI ") OR SUBJAREA(" ENVI ") OR SUBJAREA(" ENGI ") OR SUBJAREA(" BUSI ") OR SUBJAREA(" ENER ") OR SUBJAREA(" ECON ") OR SUBJAREA(" AGRI ") OR SUBJAREA(" COMP ") OR SUBJAREA(" MEDI ") OR SUBJAREA(" EART ") OR SUBJAREA(" DECI ") OR SUBJAREA(" MATH ") OR SUBJAREA(" MATE ") OR SUBJAREA(" CENG ") OR SUBJAREA(" CHEM ") OR SUBJAREA(" PHYS ") OR SUBJAREA(" MULT ") OR SUBJAREA(" PHAR ") OR SUBJAREA(" NURS ") OR SUBJAREA(" HEAL "))

SDG 9 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("accessibility" OR "artificial intelligence" OR "collaborative and social computing" OR "collaborative innovation" OR "communication hardware, interfaces and storage" OR "computational complexity and cryptography" OR "computer forensics" OR "computer graphics" OR "computer systems organization" OR "computers in other domains" OR "computing methodologies" OR "concurrent computing methodologies" OR "congestion" OR "continuous mathematics" OR "cross-computing tools and techniques" OR "cryptography" OR "data management systems" OR "database and storage security" OR "dependable and fault-tolerant systems and networks" OR "design and analysis of algorithms" OR "digitally enabled open innovation" OR "discrete mathematics" OR "distributed computing methodologies" OR "document management and text processing" OR "document types" OR "electronic commerce" OR "electronic design automation" OR "embedded and cyber-physical systems" OR "emerging technologies" OR "enterprise computing" OR "formal languages and automata theory" OR "formal methods and theory of security" OR "global value chain" OR "green process" OR "green processes" OR "green product" OR "green products" OR "greenn industry" OR "hardware test" OR "hardware validation" OR "hardware" OR

"human and societal aspects of security and privacy" OR "human computer interaction" OR "human-centered computing" OR "inclusive innovation" OR "incremental innovation" OR "industrial development" OR "industrial diversification" OR "INDUSTRIAL DIVERSIFICATION" OR "industrial ecology" OR "industrial growth" OR "industrial hygiene" OR "industrial pollution" OR "industrial safety" OR "INDUSTRIAL SOPHISTICATION" OR "industrial waste management" OR "industrial waste treatment" OR "industrialization" OR "industry" OR "information retrieval" OR "information storage systems" OR "information systems applications" OR "information systems" OR "information theory" OR "infrastructural development" OR "INFRASTRUCTURAL INVESTMENT" OR "infrastructure investment" OR "innovation" OR "innovative process" OR "innovative processes" OR "integrated circuits" OR "interaction design" OR "internet access" OR "intrusion/anomaly detection and malware mitigation" OR "logistics" OR "low carbon production" OR "machine learning" OR "manufacturing" OR "mathematical analysis" OR "mathematical software" OR "mathematics of computing" OR "medium enterprise" OR "medium enterprises" OR "medium entrepreneur" OR "medium entrepreneurs" OR "microenterprise" OR "micro-enterprise" OR "mission-oriented innovation" OR "modeling and simulation" OR "models of computation" OR "network algorithms" OR "network architectures" OR "network components" OR "network performance evaluation" OR "network properties" OR "network protocols" OR "network security" OR "network services" OR "network types" OR "networks" OR "operations research" OR "organizational innovation" OR "parallel computing methodologies" OR "physical sciences and engineering" OR "power and energy" OR "printed circuit boards" OR "probability and statistics" OR "product innovation" OR "public infrastructure" OR "public infrastructures" OR "radical innovation" OR "randomness, geometry and discrete structures" OR "real-time systems" OR "resilient infrastructure" OR "resilient infrastructures" OR "robustness" OR "security and privacy" OR "security in hardware" OR "security services" OR "small enterprise" OR "small enterprises" OR "small entrepreneur" OR "small entrepreneurs" OR "software and application security" OR "software and its engineering" OR "software creation and management" OR "software notations and tools" OR "software organization and properties" OR "structural change" OR "structural equity" OR "symbolic and algebraic manipulation" OR "systems security" OR "technological capabilities" OR "technological change" OR "technological development" OR "technology policy" OR "technology transfer" OR "theory and algorithms for application domains" OR "theory of computation" OR "transborder infrastructure" OR "transborder infrastructures" OR "transportation research and development" OR "ubiquitous and mobile computing" OR "very large scale integration design" OR "world wide web")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND (SUBJAREA(" ENGI ") OR SUBJAREA(" ENVI ") OR SUBJAREA(" SOCI ") OR SUBJAREA(" COMP ") OR SUBJAREA(" BUSI ") OR SUBJAREA(" ENER ") OR SUBJAREA(" AGRI ") OR SUBJAREA(" DECI ") OR SUBJAREA(" EART ") OR SUBJAREA(" MATE ") OR SUBJAREA(" ECON ") OR SUBJAREA(" CENG ") OR SUBJAREA(" MATH ") OR SUBJAREA(" CHEM ") OR SUBJAREA(" BIOC ") OR SUBJAREA(" ARTS ") OR SUBJAREA(" MULT ") OR SUBJAREA(" IMMU ") OR SUBJAREA(" PHAR ") OR SUBJAREA(" PSYC "))

SDG 10 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("accumulation" OR "center periphery" OR "convergence and divergence" OR "democracy and inequality" OR "development on a human scale" OR "development assistance" OR "developed countries" OR "development gap" OR "development gaps" OR "discrimination" OR "distribution of wealth" OR "Endogenous development" OR "emigration" OR "equality" OR "eradication of poverty" OR "foreign direct investment" OR "Gini coefficient" OR "GINI" OR "global distribution of wealth" OR "immigration" OR "income accruing to the top groups" OR "income concentration" OR "income shares" OR "income tax data" OR "inequality and growth path" OR "inequality and human development" OR "inequality reduction" OR "inequality" OR "inequality and political conflict" OR "Knowledge and skill diffusion" OR "Kuznets Curve" OR "marginalised population" OR "marginalised populations" OR "marginalized population" OR "marginalized populations" OR "MASS POVERTY" OR "migrant remittance" OR "migration policies" OR "migration policy" OR "north-south" OR "personal income tax" OR "political inclusion" OR "private capital" OR "PROSPERITY AND POVERTY" OR "reform program" OR "reform programme" OR "reform programmes" OR "reform programs" OR "responsible migration" OR "rural poverty" OR "segregation" OR "social exclusion" OR "social inclusion" OR "social needs" OR "social protection" OR "structural heterogeneity" OR "structure of inequality" OR "taxes" OR "technological progress and inequality" OR "underdevelopment" OR "wealth inequality" OR "WTID")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND (SUBJAREA(" SOCI ") OR SUBJAREA(" ENVI ") OR SUBJAREA(" BUSI ") OR SUBJAREA(" MEDI ") OR SUBJAREA(" ENER ") OR SUBJAREA(" ECON ") OR SUBJAREA(" AGRI ") OR SUBJAREA(" EART ") OR SUBJAREA(" ARTS ") OR SUBJAREA(" MATE ") OR SUBJAREA(" DECI ") OR SUBJAREA(" MATH ") OR SUBJAREA(" CENG ") OR SUBJAREA(" PHYS ") OR SUBJAREA(" NURS ") OR SUBJAREA(" PSYC ") OR SUBJAREA(" IMMU ") OR SUBJAREA(" MULT ") OR SUBJAREA(" PHAR ") OR SUBJAREA(" HEAL ")))

SDG 11 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("Access to basic services" OR "Access to housing" OR "basic service" OR "basic services" OR "bike" OR "building design" OR "buildings design" OR "built environment" OR "bus transport priority measures" OR "cities and infrastructures" OR "cities and territories" OR "cities" OR "city and territory" OR "city planning" OR "city systems" OR "city" OR "common rail system" OR "Community actions" OR "Community Development" OR "Community participation" OR "community transport" OR "conectividad urbana de internert" OR "Conflicts of coexistence" OR "congestion" OR "Connectivity between cities" OR "conurbation" OR "design for environment" OR "disaster risk reduction" OR "Disposal of solid waste" OR "ecodesign" OR "eco-design" OR "eco-driving" OR "electric vehicle" OR "electric vehicles" OR "emerging cities" OR "Employment centers in the city" OR "environment friendly" OR "environmental impacts of urban transport" OR "equity and social inclusion" OR "feeder transport" OR "Financing of housing" OR "Food security in the city" OR "freight modal shift" OR "fuel cell electric vehicle" OR "fuel efficient transport" OR "fuel efficient vehicle" OR "gentrification" OR "GINI index" OR "Governance of the city" OR "green car" OR "green mobility" OR "green roofs" OR "green transport cycling" OR "green vehicles" OR "high pressure common rail" OR "Home building" OR "Housing deficit" OR "Housing for rent" OR "Housing policy" OR "housing" OR "human settlement" OR "human settlements" OR "hybrid alternative drive vehicles" OR "hybrid electric vehicle" OR "hybrid electric vehicles" OR "hybrid electric vehicles" OR "hybrid vehicle" OR "hybrid vehicles" OR "inclusive urbanization" OR "inland waterway navigation" OR "innovation and cities" OR "innovations in freight transport" OR "integrated transport policy" OR "intelligent car" OR "intermodal transport" OR "intermodality" OR "inter-vehicle networks" OR "invasions" OR "land use change" OR "liquid nitrogen powered engine" OR "Living place" OR "local transport planning" OR "marginal settlements" OR "marginal willingness to pay for car" OR "megacities" OR "metropolitan areas" OR "metropolitan planning" OR "modal shift" OR "motor vehicle safety" OR "multimodal transport" OR "multinomial logit model" OR "neighborhoods" OR "nested logit model" OR "new suburbanism" OR "new urbanism" OR "non-motorized transport" OR "park-and ride" OR "passenger transport" OR "pedestrian safety" OR "plug-in hybrid electric vehicle" OR "public space policy" OR "Public space" OR "public transport policy" OR "public transport" OR "public urban transport" OR "Quality of urban life" OR "Recycling" OR "regenerative braking" OR "regional planning" OR "resilient building" OR "resilient buildings" OR "Right to the city" OR "Risk management" OR "road pricing" OR "road safety" OR "road transport" OR "road vehicle electric propulsion" OR "rural transport" OR "rural zones and cities" OR "sendai framework" OR "slum*" OR "Slums" OR "Smart cities" OR "smart cities" OR "smart growth" OR "Smog" OR "Social appropriation" OR "Social equipment" OR "Social housing" OR "Social participation" OR "spatial planning" OR "suburban climate" OR "suburban containment" OR "suburban design" OR "suburban development" OR "suburban ecology" OR "suburban environment" OR "suburban expansion" OR "suburban finance" OR "suburban footprint" OR "suburban forestry" OR "suburban form" OR "suburban governance" OR "suburban growth" OR "suburban heat island" OR "suburban housing" OR "suburban infrastructure" OR "suburban management" OR "suburban morphology" OR "suburban planning" OR "suburban policy" OR "suburban regeneration" OR "suburban renewal" OR "suburban services" OR "suburban sprawl" OR "suburban strategy" OR "suburban transport" OR "suburban transportation" OR "suburban utilities" OR "suburbanisation" OR "suburbanization" OR "Suburbs" OR "sustainable building" OR "sustainable buildings" OR "sustainable cities" OR "sustainable mobility" OR "sustainable transport and mobility" OR "sustainable transport indicators" OR "sustainable transport performance indicators" OR "sustainable transport policy" OR "sustainable transport" OR "sustainable transportation" OR "sustainable urban mobility" OR "sustainable urban transport" OR "territorial planning" OR "town*" OR "traffic congestion" OR "traffic management" OR "traffic planning" OR "traffic safety" OR "transit oriented development" OR "transit oriented development" OR "transport economics" OR "transport emission reduction" OR "transport management" OR "transport planning" OR "transport policy" OR "transport sustainability" OR "transportation" OR "travel demand management" OR "urban areas" OR "Urban basic sanitation" OR "Urban centralities" OR "urban centralities" OR "urban climate" OR "Urban coexistence" OR "urban containment" OR "Urban crime" OR "urban design" OR "Urban Development" OR "urban ecology" OR "urban environment" OR "urban expansion" OR "urban finance" OR "urban footprint" OR "urban forestry" OR "urban form" OR "urban freight logistic" OR "urban freight transport" OR "urban governance" OR "urban growth" OR "urban habitat" OR "urban heat island" OR "urban housing" OR "urban infrastructure" OR "urban management" OR "urban mobility" OR "urban morphology" OR "Urban overcrowding" OR "Urban parks" OR "Urban planification" OR "urban planning" OR "urban policy" OR "urban pollution" OR "Urban poverty" OR "urban prosperity" OR "urban public transport" OR "urban rail" OR "urban regeneration" OR "urban renewal" OR "Urban renewal" OR "urban security" OR "Urban segregation" OR "urban services" OR "Urban space" OR "urban sprawl" OR "urban strategy" OR "urban traffic control" OR "urban traffic" OR "urban transport policy" OR "urban transport strategy formulation" OR "urban transport" OR "urban transportation" OR "urban transport" OR "urban utilities" OR "urban" OR "urbanisation" OR "urbanization and development" OR "urbanization" OR "use bike" OR "vehicle safety" OR "vehicle security" OR "vehicular congestion" OR "waste management" OR "wheel-rail system" OR "zero energy building" OR "zero energy buildings" OR "zero-energy building" OR "zero-energy buildings")))) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND ((SUBJAREA("ENGI ") OR (SUBJAREA(" ENVI ") OR (SUBJAREA(" SOCI ") OR (SUBJAREA(" ENER ") OR (SUBJAREA(" AGRI ") OR (SUBJAREA(" BUSI ") OR (SUBJAREA(" COMP ") OR (SUBJAREA(" EART ") OR (SUBJAREA(" MEDI ") OR (SUBJAREA(" DECI ") OR (SUBJAREA(" MATE ") OR (SUBJAREA(" CENG ") OR (SUBJAREA(" ECON ") OR (SUBJAREA(" CHEM ") OR (SUBJAREA(" BIOC ") OR (SUBJAREA(" MATH ") OR (SUBJAREA(" PHYS ") OR (SUBJAREA(" ARTS

) OR (SUBJAREA (" MULT ") OR (SUBJAREA (" PHAR ") OR (SUBJAREA (" NURS ") OR (SUBJAREA (" PSYC ") OR (SUBJAREA (" HEAL ")))

SDG 12 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("biobased product" OR "bio-based product" OR "biobased products" OR "bio-based products" OR "biodegradable" OR "biofuel production" OR "biogasification" OR "biowaste" OR "clean production" OR "cleaner production" OR "composting" OR "consumer behavior" OR "consumer behaviors" OR "consumer behaviour" OR "consumer behaviours" OR "consumption" OR "corporate sustainability" OR "eco-efficiency" OR "ecological footprint" OR "eco-supply chain" OR "energy from waste" OR "e-waste" OR "fair trade" OR "fly ash" OR "food waste" OR "gasification" OR "green consumerism" OR "green core competence" OR "green innovation" OR "green marketing" OR "green process innovation" OR "Green product innovation" OR "greening of industry" OR "hazardous chemical" OR "hazardous chemicals" OR "hazardous waste" OR "household waste" OR "incineration" OR "industrial ecology" OR "industrial sustainability" OR "industrial symbiosis" OR "industrial waste" OR "input-output analysis" OR "integrated product policy" OR "landfill" OR "landfills" OR "leachate treatment" OR "leachate" OR "leaching test." OR "low carbon economy" OR "low-carbon economy" OR "MSW" OR "municipal solid waste" OR "municipal solid waste" OR "nuclear waste" OR "organic waste" OR "packaging waste" OR "pesticide*" OR "pollutant*" OR "post-harvest" OR "product service system" OR "product stewardship" OR "production" OR "pyrolysis" OR "radioactive waste disposal" OR "radioactive waste" OR "recycl*" OR "recycling" OR "resource footprint" OR "Self-consumption" OR "solid waste management" OR "solid waste" OR "solid wastes" OR "source reduction" OR "supply chain" OR "sustainable chemistry" OR "sustainable consumption and production" OR "sustainable consumption" OR "sustainable energy use" OR "sustainable lifestyle" OR "sustainable procurement" OR "sustainable production and consumption" OR "sustainable production" OR "toxic chemical" OR "toxic chemicals" OR "waste activated sludge" OR "waste characterization" OR "waste collection" OR "waste disposal" OR "waste generation" OR "waste management" OR "waste materials" OR "waste minimization" OR "waste plastics" OR "waste recycling" OR "waste utilization" OR "waste valorization" OR "zero waste")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND ((SUBJAREA ("ENVI ") OR (SUBJAREA (" ENGI ") OR (SUBJAREA (" AGRI ") OR (SUBJAREA (" ENER ") OR (SUBJAREA (" SOCI ") OR (SUBJAREA (" BUSI ") OR (SUBJAREA (" EART ") OR (SUBJAREA (" COMP ") OR (SUBJAREA (" CENG ") OR (SUBJAREA (" MATE ") OR (SUBJAREA (" CHEM ") OR (SUBJAREA (" BIOC ") OR (SUBJAREA (" MEDI ") OR (SUBJAREA (" ECON ") OR (SUBJAREA (" DECI ") OR (SUBJAREA (" PHYS ") OR (SUBJAREA (" MATH ") OR (SUBJAREA (" IMMU ") OR (SUBJAREA (" MULT ") OR (SUBJAREA (" PHAR ") OR (SUBJAREA (" VETE ") OR (SUBJAREA (" NURS ") OR (SUBJAREA (" PSYC ") OR (SUBJAREA (" HEAL ") OR (SUBJAREA (" Undefined ")))

SDG 13 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("abrupt climate change" OR "adaptation" OR "adaptive management" OR "air-sea interactions" OR "anthropocene" OR "anthropogenic" OR "atmosphere" OR "biodivers*" OR "bioeconomy" OR "biogeochemical cycle" OR "biological production" OR "carbon dioxide" OR "carbon sequestration" OR "carbon" OR "clean development mechanism" OR "climate action" OR "climate adaptation" OR "climate change adaptation" OR "climate change and agriculture" OR "climate change" OR "climate effect" OR "climate feedback" OR "climate forcing" OR "climate impact" OR "climate mitigation" OR "climate model" OR "climate modeling" OR "climate modelling" OR "climate models" OR "climate policies" OR "climate policy" OR "climate prediction" OR "climate predictions" OR "climate resilience" OR "climate risk" OR "climate risks" OR "climate sensitivity" OR "climate service" OR "climate services" OR "climate signal" OR "climate signals" OR "climate tipping point" OR "climate variability" OR "climate variation" OR "climate variations" OR "climate warming" OR "climate" OR "climatic changes" OR "climatology" OR "conservation" OR "consumption" OR "deforestation" OR "drought" OR "ecoclimatology" OR "eco-climatology" OR "El Niño-Southern Oscillation" OR "effect permafrost" OR "emission*" OR "ENSO" OR "extreme" OR "floods" OR "food chain" OR "food chains" OR "glacier retreat" OR "global change" OR "global climate change" OR "global warming potential" OR "global warming" OR "green jobs" OR "greenhouse gas (es)" OR "greenhouse gas emissions" OR "greenhouse gases" OR "greenhouse" OR "hazard*" OR "holocene" OR "human impact" OR "ice-ocean interaction" OR "ice-ocean interactions" OR "intergovernmental panel on climate change (ipcc)" OR "ipcc" OR "island*" OR "kyoto protocol" OR "land use change" OR "land use" OR "megacit*" OR "methane" OR "migration" OR "mitigation" OR "nitrogen cycle" OR "nitrogen cycles" OR "north atlantic oscillation extreme events drought" OR "ocean acidification" OR "ocean ph" OR "ocean temperature" OR "ocean warming" OR "ozone" OR "paleoclimate" OR "palynology" OR "permafrost" OR "phenology" OR "policy" OR "precipitation changes" OR "production" OR "radiation" OR "radiative forcing" OR "regional climate" OR "regional climates" OR "scenarios" OR "sea ice" OR "sea level" OR "sea levels" OR "sea-level rise" OR "stable isotopes" OR "streamflow" OR "thermal expansion" OR "thermohaline circulation" OR "ultraviolet radiation" OR "UNFCCC" OR "United Nations Framework Convention on Climate Change" OR "urban climate" OR "urban climates" OR "warming")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND ((SUBJAREA ("ENVI ") OR (SUBJAREA (" ENGI ") OR (SUBJAREA (" AGRI ") OR (SUBJAREA (" SOCI ") OR (SUBJAREA (" ENER ") OR (SUBJAREA (" BUSI ") OR (SUBJAREA (" EART ") OR (SUBJAREA (" COMP ") OR (SUBJAREA (" MEDI ") OR (SUBJAREA (" CENG ") OR (SUBJAREA (" BIOC ") OR (SUBJAREA ("

(" ECON ") OR (SUBJAREA (" MATE ") OR (SUBJAREA (" CHEM ") OR (SUBJAREA (" PHYS ") OR (SUBJAREA (" DECI ") OR (SUBJAREA (" MATH ") OR (SUBJAREA (" IMMU ") OR (SUBJAREA (" MULT ") OR (SUBJAREA (" PHAR ") OR (SUBJAREA (" VETE ") OR (SUBJAREA (" HEAL "))

SDG 14 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("acidification of the oceans" OR "algae" OR "aquaculture" OR "artisanal fisheries" OR "artisanal fishing" OR "atlantic salmon" OR "barramundi" OR "barrier reef" OR "biochemical cycle" OR "biochemical cycles" OR "biogeochemical cycle" OR "biogeochemical cycles" OR "biological oceanography" OR "chemical oceanography" OR "coastal eutrophication" OR "coastal geography" OR "coastal habitat" OR "coastal habitats" OR "coastal management" OR "coastal zone" OR "cod" OR "coral bleach" OR "coral bleaching" OR "coral reef" OR "diatoms" OR "El Niño phenomenon" OR "eochromis" OR "euphotic zone" OR "eutrophicat" OR "eutrophication of aquatic ecosystems" OR "farmed aquatic animal" OR "fish biomass" OR "fish farm" OR "fish farming" OR "fish stocking" OR "fish sustainable" OR "fisheries management sustainable" OR "fisheries management" OR "fisheries sustainable development" OR "fishery management" OR "freshwater marine currents" OR "gadus mhua" OR "geological oceanography" OR "glacier dynamics" OR "glacier mass" OR "glacier retreat" OR "glaciology" OR "global circulation model" OR "global circulation modeling" OR "global circulation modelling" OR "global circulation models" OR "haddock" OR "halocline" OR "herring" OR "hydrography" OR "hydrology" OR "ice-ocean" OR "impacts of climate change" OR "integrated aquaculture" OR "kelp forest" OR "La Niña phenomenon" OR "limnology" OR "Lion fish" OR "littoral zone" OR "local fauna" OR "longline sustainable development sustainability" OR "Loss of marine biodiversity" OR "macroalgae" OR "mangrove" OR "mariculture" OR "marine biodiversity" OR "marine biodiversity" OR "marine biogeochemistry" OR "marine biogeography" OR "marine biology" OR "marine chemistry" OR "marine climatology" OR "Marine contamination" OR "marine ecology" OR "marine ecosystems" OR "marine geology" OR "marine mammals" OR "marine meteorology" OR "marine overfishing" OR "marine pollution" OR "marine productivity" OR "marine protected areas" OR "marine reserve" OR "marine reserves" OR "marine upwelling" OR "marine" OR "microalgae" OR "mollusk" OR "native fauna" OR "niloticus" OR "ocean acidification" OR "ocean circulation" OR "ocean currents" OR "oceanography" OR "overfishing" OR "paleoceanography" OR "paleo-oceanography" OR "penaeus monodon" OR "phenomena of El Niño and La Niña" OR "physical oceanography" OR "plankton" OR "Pterois antennata" OR "rainbow trout" OR "Rising sea levels" OR "salmo salar" OR "salmon farm" OR "salmon" OR "sea" OR "seabirds" OR "seagrass" OR "seas" OR "sedimentation" OR "shrimp aquaculture" OR "shrimp" OR "sponges" OR "submarine geophysics" OR "sustainability" OR "sustainable fisheries" OR "thermohaline circulation" OR "tilapia" OR "trawling sustainable development sustainability" OR "water cycle" OR "water cycles")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND ((SUBJAREA ("ENVI ") OR (SUBJAREA (" SOCI ") OR (SUBJAREA (" ENGI ") OR (SUBJAREA (" AGRI ") OR (SUBJAREA (" ENER ") OR (SUBJAREA (" BUSI ") OR (SUBJAREA (" COMP ") OR (SUBJAREA (" MEDI ") OR (SUBJAREA (" EART ") OR (SUBJAREA (" ECON ") OR (SUBJAREA (" BIOC ") OR (SUBJAREA (" MATE ") OR (SUBJAREA (" CENG ") OR (SUBJAREA (" DECI ") OR (SUBJAREA (" CHEM ") OR (SUBJAREA (" PHYS ") OR (SUBJAREA (" IMMU ") OR (SUBJAREA (" MULT ") OR (SUBJAREA (" PHAR ") OR (SUBJAREA (" VETE ") OR (SUBJAREA (" Undefined ")))

SDG 15 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("afforestation" OR "Agricultural frontier expansion" OR "Agricultural frontier" OR "agroforestry" OR "alien species" OR "Amazon jungle" OR "aquifer contamination" OR "aquifer" OR "aquifers modelling" OR "astrobiology" OR "atmospheric chemistry" OR "biodiversity conservation" OR "biodiversity" OR "bioeconom" OR "bio-econom" OR "Biogeography" OR "Biological Diversity" OR "biological production" OR "Biomodels" OR "boreal forest" OR "Burning the ground" OR "carbon sequestration" OR "chytridiomycosis" OR "climate change and geology" OR "climatic change and geology" OR "climatology" OR "coarse woody debris" OR "coastal processes and geology" OR "coastal zones and geomorphology" OR "community forestry" OR "Conservation of ecosystems" OR "conservation planning" OR "Danger of Extinction" OR "data processing and hydrogeology" OR "deforestation" OR "Desertification" OR "dryland" OR "earth system" OR "ecological resilience" OR "ecosystem function" OR "ecosystem functioning" OR "ecosystem management" OR "ecosystem services" OR "ecosystem" OR "Ecosystems" OR "Elephant ivory" OR "endangered species" OR "endemism" OR "energy and ocean currents" OR "energy and thermal gradients" OR "environmental geology" OR "environmental health and geology" OR "estuarine processes and geology" OR "ethnobiology" OR "ethnobotany" OR "ethnogeology" OR "exotic species" OR "extinction risk" OR "extinction risks" OR "Extinction" OR "fluvial hydraulics" OR "food chain" OR "food chains" OR "forensic geology" OR "forest dynamics" OR "forest fire" OR "forest fires" OR "forest fragmentation" OR "forest health" OR "forest inventory" OR "forest management" OR "forest policy" OR "forest soil" OR "forest structure" OR "forest sustainability" OR "forest" OR "forestry" OR "fracking" OR "Genetic resources" OR "geodynamics" OR "geological engineering" OR "geological heritage" OR "geological oceanography" OR "geophysics" OR "geotechnics" OR "geothermal" OR "global warming and geology" OR "hábitat fragmentation" OR "habitat loss" OR "hydic monitoring" OR "hydrogeochemistry" OR "hydrogeological mapping" OR "hydrogeological monitoring" OR "hydrogeology and hydroelectric" OR "indicator species" OR "instrumentation and monitoring" OR "International Treaty on Plant Genetic Resources

for Food and Agriculture" OR "invasive alien species" OR "invasive species" OR "land conservation" OR "land degradation" OR "land use" OR "land uses" OR "landscape biota evolution" OR "Landscape ecology" OR "landslides and geology" OR "leaf area index" OR "limnology" OR "Loss of ecosystems" OR "macroecology" OR "macroinvertebrates" OR "madagascar" OR "marine platforms and geomorphology" OR "mass removal processes" OR "medical geology" OR "Melting of glaciers" OR "meteorology" OR "mineral deposits" OR "mineral resources" OR "mountain" OR "Nagoya Protocol on Access to Genetic Resources" OR "Natural parks" OR "natural regeneration" OR "Natural reserves" OR "nature conservation" OR "neotectonics" OR "neotropics" OR "non-conventional hydrocarbons" OR "paleoclimatology" OR "Páramo" OR "phylogeography" OR "picea abies" OR "pinus ponderosa" OR "pinus sylvestris" OR "plant diversity" OR "Poaching" OR "ponderosa pine" OR "prescribed fire" OR "protected areas" OR "protected species" OR "Protection of ecosystems" OR "recharge of aquifer" OR "Red List Index" OR "Red list" OR "reforestation" OR "Reforestation" OR "reserve selection" OR "reservoir characterization" OR "reservoir simulation" OR "rhinoceros horn" OR "risk assessment and geology" OR "risk management and geology" OR "river systems and modelling" OR "Rosewood" OR "secondary forest" OR "sediment transport and modelling" OR "seeds" OR "seismic interpretation" OR "seismology" OR "seismotectonics" OR "shale" OR "silviculture" OR "Soil contamination" OR "soil degradation" OR "soil degradation" OR "solar energy" OR "species diversity" OR "species richness" OR "species-area relationship" OR "stand structure" OR "sustainability" OR "sustainable development" OR "sustainable forest management" OR "sustainable forestry" OR "Sustainable management of flora and fauna" OR "Terrestrial biodiversity" OR "territorial order and geology" OR "thinning" OR "threatened species" OR "Transgenic" OR "tropical deforestation" OR "tropical forest" OR "tropical forests" OR "tropical rain forest" OR "Tropical rainforest" OR "urban forestry" OR "vascular plants" OR "water data and modelling" OR "water data and processing" OR "wave power" OR "wetland" OR "wildfire" OR "wildlife and wild flora" OR "wildlife market" OR "wildlife markets" OR "wildlife product" OR "wildlife products" OR "wildlife traffic" OR "wildlife trafficking" OR "wildlife trafficking" OR "wind energy")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND ((SUBJAREA(" ENGI ") OR (SUBJAREA(" ENVI ") OR (SUBJAREA(" SOCI ") OR (SUBJAREA(" AGRI ") OR (SUBJAREA(" ENER ") OR (SUBJAREA(" BUSI ") OR (SUBJAREA(" COMP ") OR (SUBJAREA(" EART ") OR (SUBJAREA(" ECON ") OR (SUBJAREA(" MATE ") OR (SUBJAREA(" DECI ") OR (SUBJAREA(" CENG ") OR (SUBJAREA(" BIOC ") OR (SUBJAREA(" CHEM ") OR (SUBJAREA(" MATH ") OR (SUBJAREA(" PHYS ") OR (SUBJAREA(" MULT ") OR (SUBJAREA(" IMMU ") OR (SUBJAREA(" PHAR ") OR (SUBJAREA(" VETE ") OR (SUBJAREA(" Undefined ")))

SDG 16 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("accountable institution" OR "accountable institutions" OR "actual innocence" OR "armed conflict" OR "armed conflicts" OR "arms flow" OR "asset laundering" OR "bribery" OR "child abuse" OR "citizen oversight" OR "citizen participation" OR "civil conflict" OR "civil conflicts" OR "coexistence" OR "community-based primary production economies" OR "conflict management" OR "conflict resolution mechanisms" OR "corruption" OR "counternarcotic poli"" OR "crime" OR "crimes" OR "criminal organizations" OR "criminal policy strategy" OR "criminal" OR "criticism" OR "crop substitution" OR "Crop substitution" OR "crops for illicit use" OR "culture of peace" OR "de-mining and cleaning processes" OR "democracy" OR "democratization" OR "detention" OR "drug trafficking" OR "economic alternatives" OR "economic reincorporation" OR "effective institution" OR "effective institutions" OR "electoral participation" OR "end of conflict" OR "ethnic conflict" OR "ethnic conflicts" OR "ethnic groups" OR "exoneration" OR "extreme poverty eradication" OR "fair societies" OR "fair society" OR "fight against corruption" OR "formalization of land ownership" OR "freedom of information" OR "fundamental freedom" OR "fundamental freedoms" OR "genocide" OR "government budget" OR "government budgets" OR "Grassroots innovation" OR "homicid" OR "human right" OR "human rights" OR "human traffic" OR "human trafficking" OR "illegal economi" OR "illicit drugs" OR "illicit use crop" OR "inclusive institution" OR "inclusive institutions" OR "inclusive societies" OR "inclusive society" OR "independence of judiciary" OR "independent judiciary" OR "jail" OR "judicial system" OR "justice" OR "labour market formalisation" OR "land access" OR "land acquisition" OR "land expropriation" OR "land ownwership" OR "land registration" OR "land registry" OR "laying down of arms" OR "legal identity for all" OR "legal remedies" OR "legal remedy" OR "monitoring and verification OF ACCORDS" OR "murder" OR "narcotics" OR "national natural park" OR "non-repetition" OR "non-replanting agreements" OR "participative planning" OR "participatory political culture" OR "peace agreement" OR "peace" OR "pluralism AND PEACE" OR "POLITICAL AGREEMENT" OR "political opposition" OR "political participation" OR "political reincorporation" OR "population well-being" OR "prevention mesures" OR "prison" OR "Pro-poor and inclusive innovation" OR "protection mesures" OR "public transparency" OR "reconciliation" OR "refugee" OR "regional transformation" OR "reparation" OR "responsible institution" OR "responsible institutions" OR "rule of law" OR "rural cadastres" OR "rural economy" OR "rural inclusion" OR "rural reform" OR "rural urban gap" OR "security guarantees" OR "separation of powers" OR "small growers of illicit crops" OR "social agreement" OR "social contract" OR "social contracts" OR "social development" OR "Social innovation" OR "social protest" OR "social reincorporation" OR "social services" OR "solidarity economies" OR "surveillance services" OR "technical assistance" OR "territorial planning" OR "territorial-based approach" OR "terrorism" OR "tolerance" OR "torture" OR "transitional justice" OR "transparent institution" OR "transparent institutions" OR "tribunal" OR "truth" OR "verification mechanisms" OR "victims" OR "violence" OR "violent conflict" OR "violent conflicts" OR "war" OR "wars")))) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re ")) AND (SUBJAREA(

"SOCI ") OR SUBJAREA("AGRI ") OR SUBJAREA("BUSI ") OR SUBJAREA("ECON ") OR SUBJAREA("ARTS ") OR SUBJAREA("COMP ") OR SUBJAREA("BIOC ") OR SUBJAREA("PSYC ")

SDG 17 Query

(TITLE-ABS-KEY((sustainab* OR "sustainable development goal") AND ("academic corporate" OR "academic-corporate" OR "agenda 21" OR "agreement" OR "aid effectiveness" OR "alliance" OR "bilateral donor" OR "bilateral donors" OR "BRICS" OR "capacity building" OR "capacity-building" OR "CGIAR" OR "collaboration" OR "community based" OR "community-based" OR "cooperation" OR "cop 21" OR "corporate social responsibility" OR "CYTED program" OR "ECLAC" OR "FEALAC" OR "global governance" OR "global" OR "globelics" OR "governance" OR "horizon 2020" OR "Human Development and Capability Association" OR "innovation oecd" OR "institution*" OR "interdisciplinary" OR "inter-disciplinary" OR "international" OR "intersectorial" OR "intersectorial" OR "multidisciplinary" OR "multi-disciplinary" OR "multilateral" OR "multi-lateral" OR "multisectorial" OR "multi-sectorial" OR "multistakeholder" OR "multi-stakeholder" OR "north-South cooperation" OR "Official Development Aid" OR "open access" OR "open data" OR "open science" OR "open source" OR "participatory" OR "partnership" OR "public private" OR "public-private" OR "RICYT" OR "South-South cooperation" OR "transdisciplinary" OR "trans-disciplinary" OR "transsectorial" OR "trans-sectorial" OR "triangular cooperation")) AND (DOCTYPE("ar ") OR DOCTYPE(" cp ") OR DOCTYPE(" re "))) AND (SUBJAREA("SOCI ") OR SUBJAREA("ENVI ") OR SUBJAREA("ENGI ") OR SUBJAREA("BUSI ") OR SUBJAREA("COMP ") OR SUBJAREA("ECON ") OR SUBJAREA("EART ") OR SUBJAREA("DECI ") OR SUBJAREA("CENG "))

Appendix C

Glossary of Terms

Article/Publication types (unless otherwise indicated) denotes the main types of peer reviewed documents published in journals: articles, reviews, and conference papers.

Article/Publication output for an institute or country is the count of articles with at least one author from that institution or country respectively (according to the affiliation listed in the authorship byline). All analyses make use of 'whole' rather than 'fractional' counting: an article representing international collaboration (with at least two different countries listed in the authorship byline) is counted once each for every institution or country listed.

Compound Annual Growth Rate (CAGR) is defined as the year-over-year constant growth rate over a specified period of time. Starting with the first value in any series and applying this rate for each of the time intervals yields the amount in the final value of the series.

$$\text{CAGR}(t_0, t_n) = (V(t_n)/V(t_0))^{\frac{1}{t_n-t_0}} - 1$$

$V(t_0)$: start value

$V(t_n)$: finish value

$t_n - t_0$: number of years.

Citation is a formal reference to earlier work made in an article or patent, frequently to other journal articles. A citation is used to credit the originator of an idea or finding and is usually used to indicate that the earlier work supports the claims of the work citing it. The number of citations received by an article from subsequently-published articles is a proxy of the importance of the reported research.

CiteScore is metric for measuring journal impact in Scopus. The calculation of CiteScore for the current year is based on the number of citations received by a journal in that year for the documents published in the journal in the past three years, divided by the documents indexed in Scopus published in those three years.

Field-weighted citation impact (FWCI) is an indicator of mean citation impact and compares the actual

number of citations received by an article with the expected number of citations for articles of the same document type (article, review or conference proceeding paper), publication year and subject field. When an article is classified in two or more subject fields, the harmonic mean of the actual and expected citation rates is used. The indicator is therefore always defined with reference to a global baseline of 1.0 and intrinsically accounts for differences in citation accrual over time, differences in citation rates for different document types (reviews typically attract more citations than research articles, for example) as well as subject-specific differences in citation frequencies overall and over time and document types. It is one of the most sophisticated indicators in the modern bibliometric toolkit.

When field-weighted citation impact is used as a snapshot, an un-weighted variable window is applied. The field-weighted citation impact value for '2008', for example, is comprised of articles published in 2008 and their field-weighted citation impact in the period 2008-12, while for '2012,' it is comprised of articles published in 2012 and their field-weighted citation impact in 2012 alone. When field-weighted citation impact is used in trend analysis, a weighted moving window is applied. The field-weighted citation impact value for '2010', for example, is comprised of the weighted average of the unweighted variable field-weighted citation impact values for 2008 and 2012 (weighted 13.3% each), 2009 and 2011 (weighted 20% each) and for 2010 (weighted 33.3%). The weighting applies in the same ratios for previous years also. However, for 2011 and 2012 it is not possible to extend the weighted average by 2 years on either side, so weightings are readjusted across the remaining available values.

Field-weighted download impact (FWDI) is a similar indicator to FWCI that is based on downloads rather than citations.

h-index is the number of articles in the collection (h) that have received at least (h) citations over the whole period. For example, an h-index of 8 means that 8 of the collection's articles have each received at least 8 citations. h-index is not skewed by a single highly cited paper, nor by a large number of poorly cited documents. This flexible measure can be

applied to any collection of citable documents. However, when applied to the documents produced by a single author, it is important to acknowledge that h-index is often biased against early stage investigators because of their lower publication count. Throughout this report, h-index is calculated based on all of the researcher's publications (articles, reviews and conference proceedings) from 1996-2015.

International collaboration (i.e., research collaboration) in this report is indicated by articles with at least two different countries listed in the authorship byline.

Journal is a peer-reviewed periodical in which scholarship relating to a particular research field is published, and is the primary mode of dissemination of knowledge in many fields. Research findings may also be published in conference proceedings, reports, monographs and books and the significance of these as an output channel varies between fields.

Publication/article types (unless otherwise indicated) denotes the main types of peer reviewed documents published in journals: articles, reviews, and conference papers.

Publication/article output for an institute or country is the count of articles with at least one author from that institution or country respectively (according to the affiliation listed in the authorship byline). All analyses make use of 'whole' rather than 'fractional' counting: an article representing international collaboration (with at least two different countries listed in the authorship byline) is counted once each for every institution listed.

ScienceDirect Downloads are the count of the number of times ScienceDirect papers within the set are downloaded. A download is defined as either downloading a PDF of an article on ScienceDirect, Elsevier's full-text platform or looking at the full-text online on ScienceDirect, without downloading the actual PDF. Counts provided in this report are current up to December 31, 2017.

Top 10 percentile articles are those among the top 10% based on FWCI of all articles published and cited in a given period. An institution's number or share of highly-cited articles is treated as indicative of the excellence of their research. In this report, we present data on top 10% cited articles.

About

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