

RUN LATIN AMERICAN DELEGATION

March 18-26



AUSTRALIA RESEARCH



- Australia is ranked 7th for scholarly output in 2022 out of the top 10 scientific research-intensive countries. We are ranked second on a population-adjusted basis
- Australia has 15 universities in the top 200 in most recent QS rankings and 11 universities in THE World University Rankings top 200-5th in the world, behind significantly larger economies
- RUN universities are swiftly moving up these rankings –and do particularly well in subject rankings in fields such as Agriculture and Oceanography
- Australia has 22 in the top 200 of QS Sustainability and 20 in the top 200 of THE Impact
- Australia is responsible for around 4 per cent of all scientific contributions globally
- In 2022, 59.8% of all research publications with an Australian author included an international co-author, higher than the EU (43.5%) and the US (37.3%)



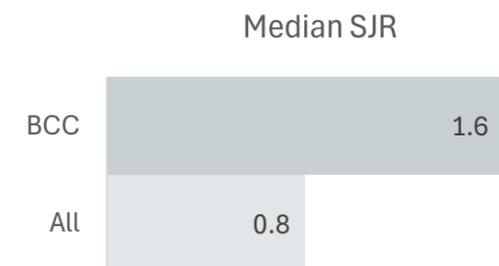
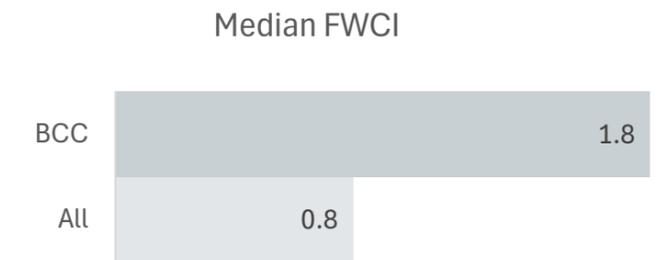
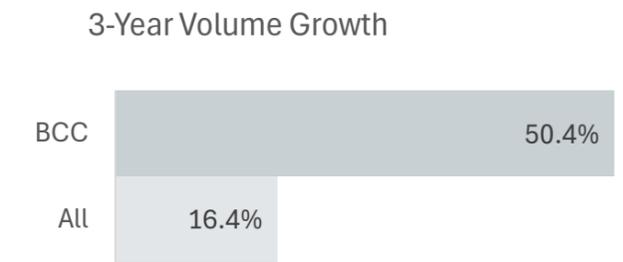
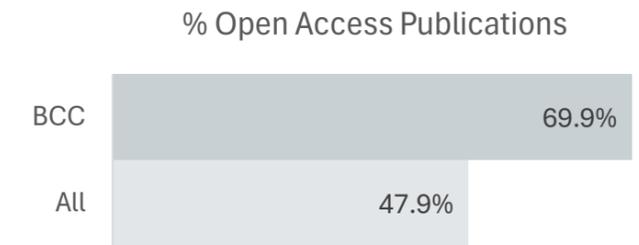
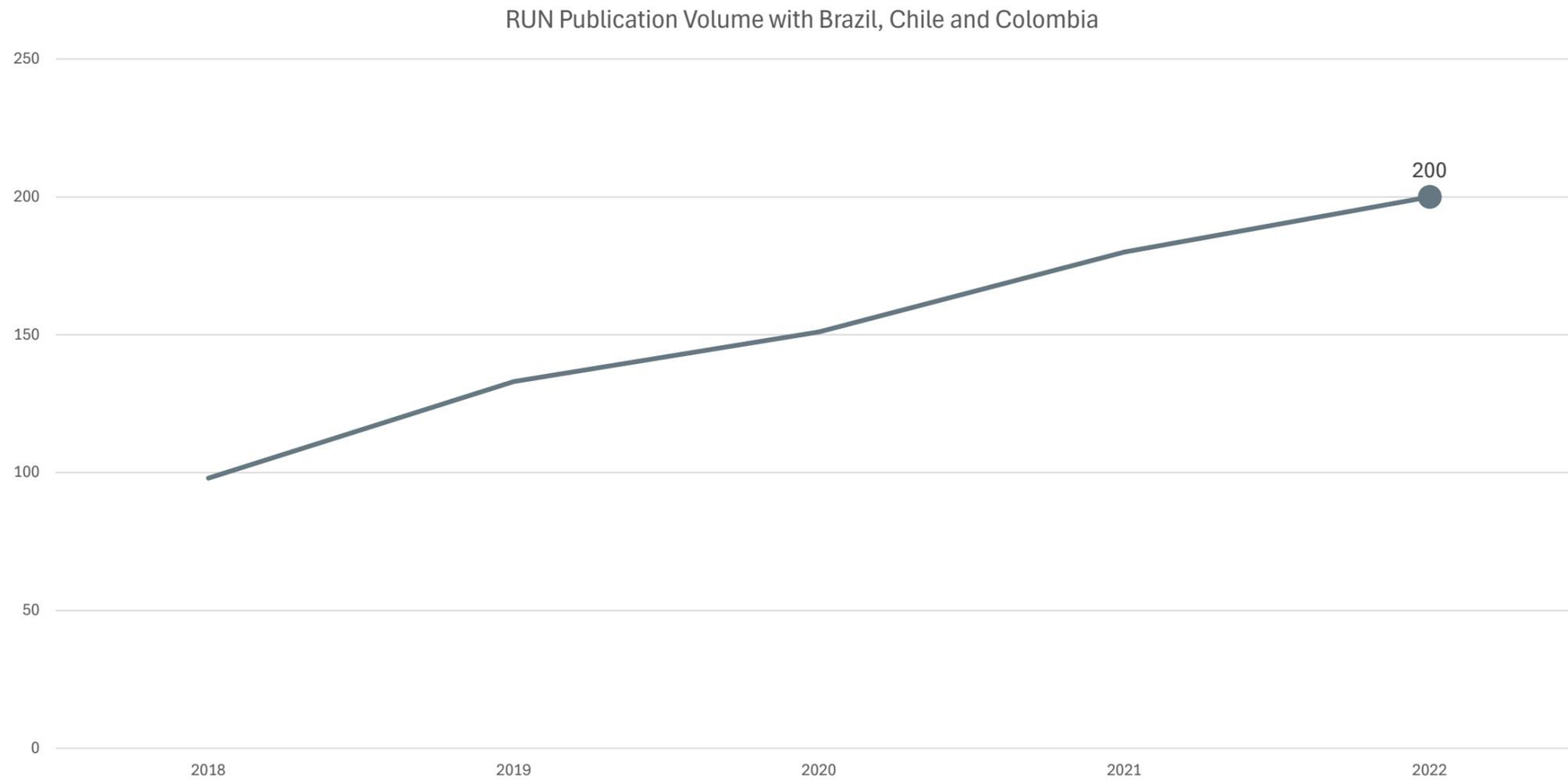
AUSTRALIA/COLOMBIA RESEARCH



- Colombia is the second largest Latin American source country for students in Australia, with an 83 per cent increase in student numbers between 2013 and 2017-this exchange is very important to build relationships and potential HDR
- Australia and Colombia already cooperate in research on a range of issues of mutual interest, including energy, infrastructure, water management, coral reefs, education, and transnational crime
- Colombian Universities have been involved in large projects with Australian universities such as the ARC Centre of Excellence for Integrated Coral Reef Studies-however there is much opportunity to develop further collaboration



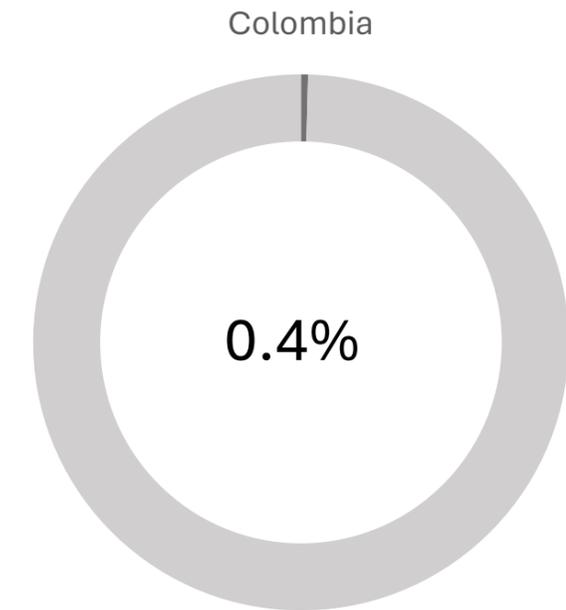
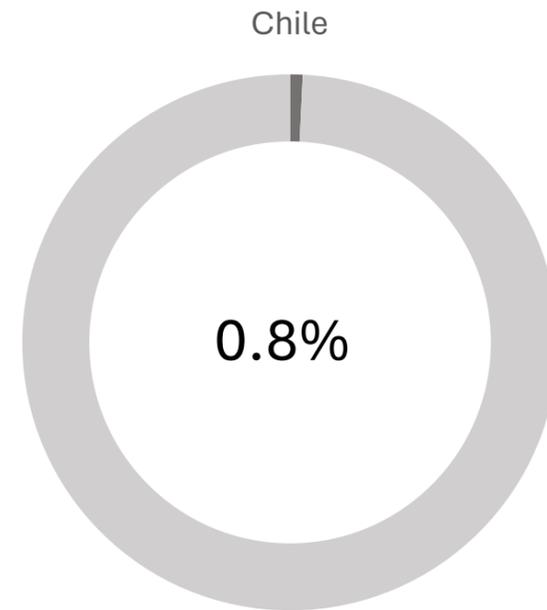
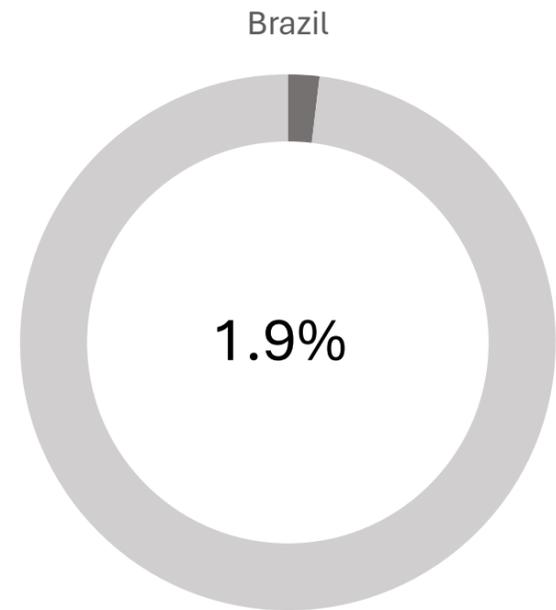
Research vitality: RUN collaborations with Brazil, Colombia and Chile



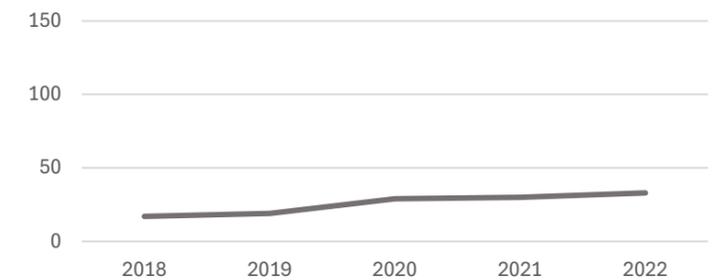
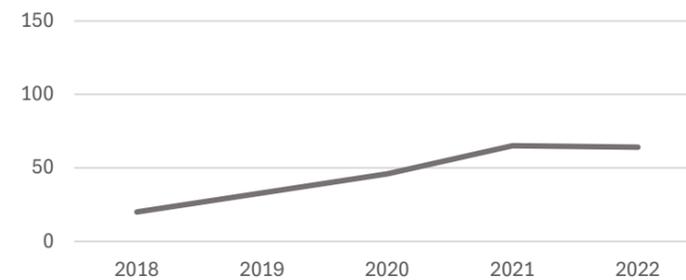
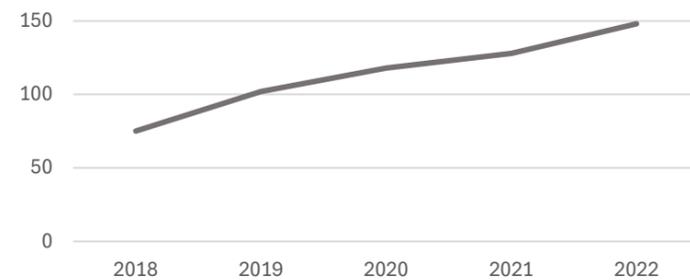
There is a significant growth pattern for research collaborations between RUN institutions and institutions in BCC (Brazil, Chile, Colombia). Research output from these collaborations grew from 133 publications in 2019 to 200 publications in 2022, a 3-year growth rate of **50.4%** compared to **16.4%** for all RUN publications in general. These collaborations are typically of higher quality, with a median field-weighted citation impact (FWCI) of **1.8** compared to **0.8** for the RUN alone.

Research vitality: RUN collaborations with BCC

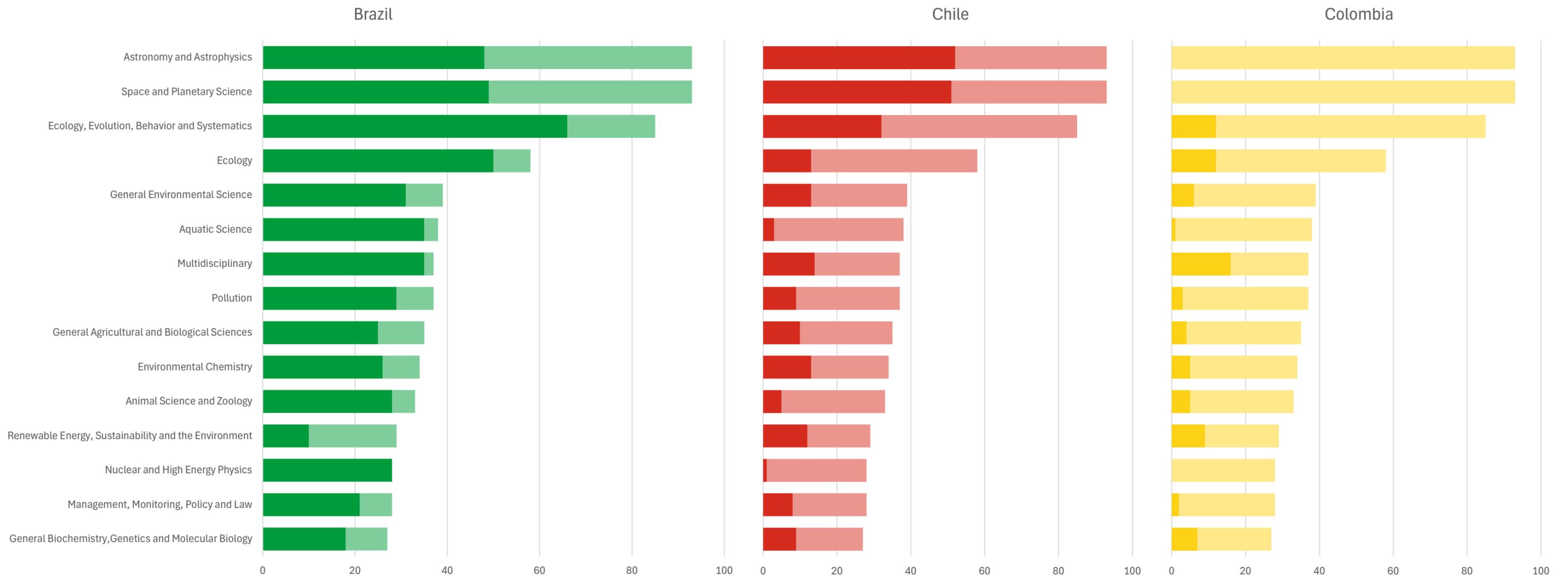
% Total RUN
publication
volume



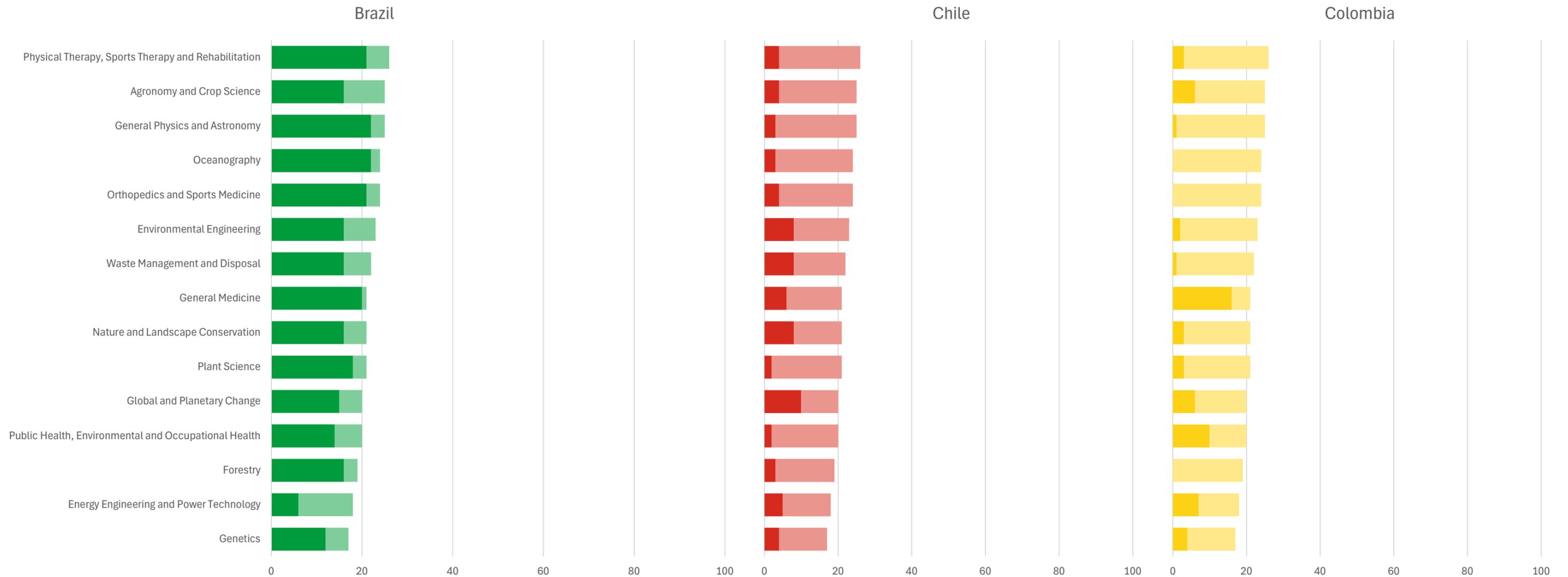
Publication
volume by
country



Publication volume by ASJC field (2018-2022)



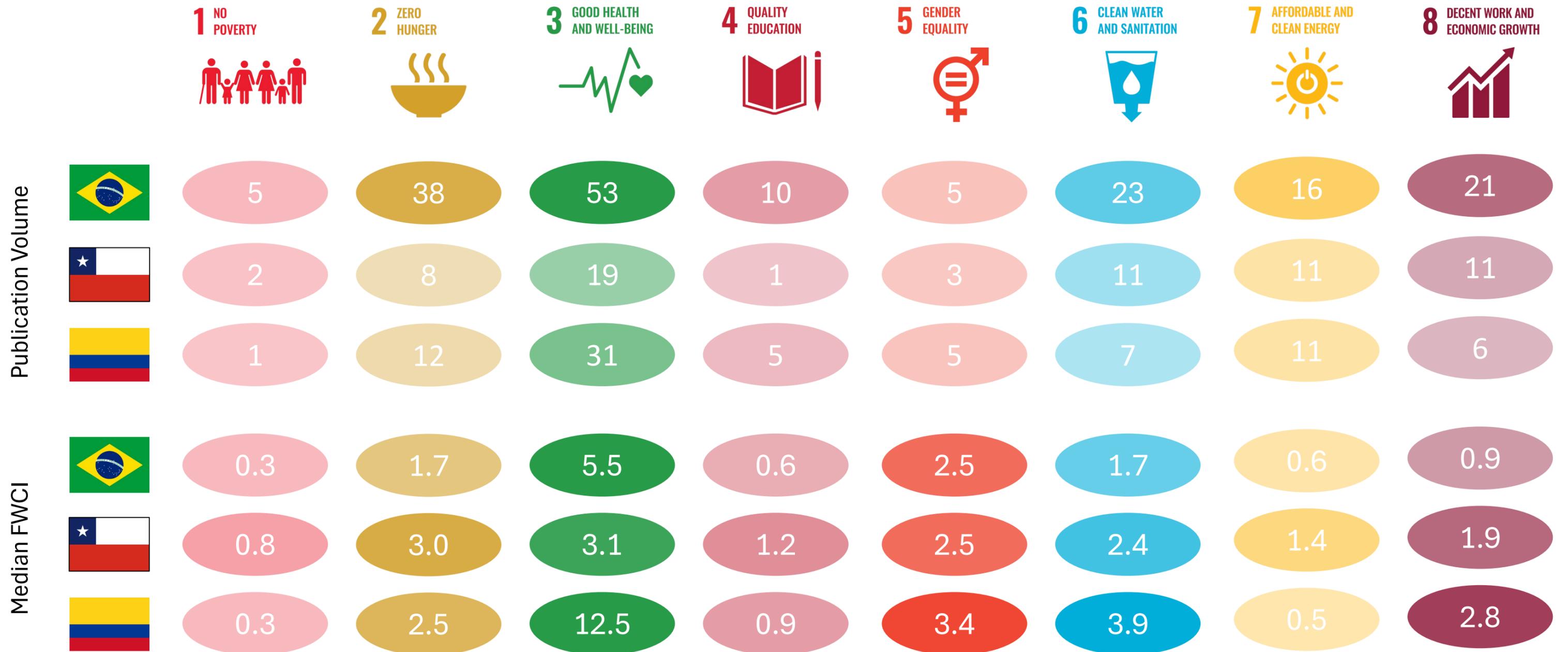
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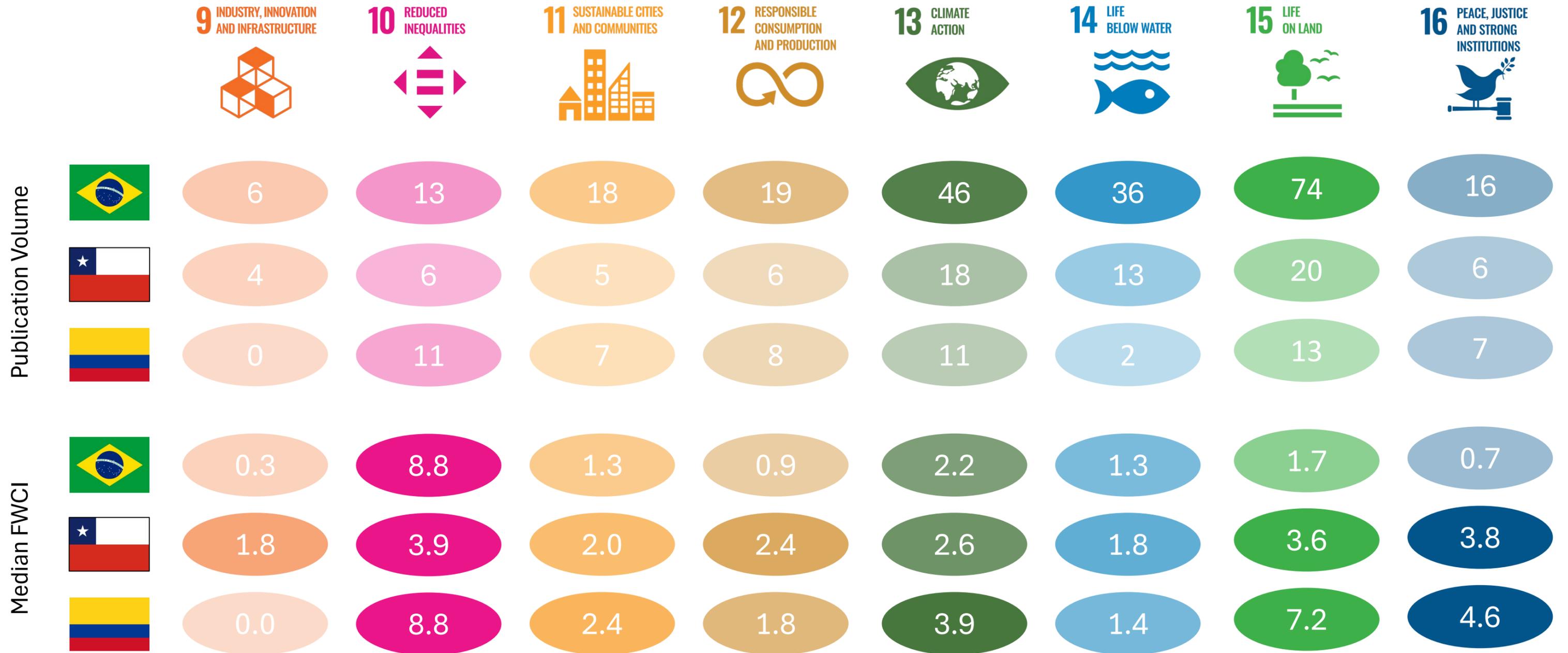
We also see a growing number of joint publications between Colombian and RUN units in fields such as Agronomy and Crop Science, environmental engineering, medicine, public health, energy engineering and power technology and genetics

RUN output by country and SDG (2018-2022)

Collaborations between RUN and Colombian Unis In the RUN-BCC collaborations, Colombia contribute a significant proportion of their volume to SDGs 15, 3 and 13, all above world average quality. Colombia has particular strength in SDG 3, with an FWCI of **12.5** across its 31 papers, driven principally by highly cited systemic analyses on global burden of disease.



RUN output by country and SDG (2018-2022)



THE ACCORD

- Reduced govt and industry spending on research over the last decade
- Blueprint to transform HE sector in Australia for the next decade
- High quality of Australian Research
- Meet Australia's future skills challenges
- Equity lens Improving regional higher education
- Commitment to building a stronger research system
- More university industry collab – especially in HDR
- Recommended more funding and funding the full cost of research
- Increased opportunities for early career researchers –fellowships
- First Nations self-determination

Australian Research Council

- International organisations can collaborate on all grant schemes operated by ARC [Linkage Program](#) and ARC's [Discovery Program](#)
- Around 60 per cent of ARC funded projects have an international collaboration component
- **Linkage Program**
- **Linkage Grants** –University/Industry partnerships focus on challenges or opportunities of relevance to research end-users–Funding of between \$50,000 and \$300,000 per annum for up to five years may be awarded for each Linkage Projects application. Success rates vary per round 30-40 per cent. In the most recent round, of the 50 projects funded 26 of those projects foregrounded 34 instances of international collaboration



Tracking wetland condition globally: Professor Richard Kingsford, UNSW, , Director of the Centre for Ecosystem Science
ARC Project with researchers from Australia, Brazil, France, South Africa and the United States

Australian Research Council



- **Industrial Transformation Hubs/Training Centres**-university and industry on a larger scale –Hubs support joint research activity, between the Australian higher education sector and industry, designed to focus on strategic outcomes that cannot be realised independently of each other. Centres –Funding of between \$650,000 and \$1 million per annum for between 3 to 5 consecutive years may be awarded for each Industrial Transformation Research Hub. Success rate around 34 per cent in 2023. In 2022 round 8 countries other than Australia
- **Centres of Excellence** The ARC Centres of Excellence are prestigious focal points of expertise through which high-quality researchers maintain and develop Australia's international standing in research areas of national priority. Funding of between \$1 million and \$5 million per annum for up to 7 consecutive years. International collaboration is an important component of ARC Centres of Excellence. In the last round of COES a total of 27 countries are participating in approved COES



Australian Research Council



- **Discovery Projects** “Blue Sky Research” projects -Discovery Program funds excellent, internationally competitive research undertaken by individuals and teams. The research funded under the Discovery Program builds Australia’s research capacity by supporting and facilitating research training and career opportunities for excellent Australian and International researchers. Funding of between \$30,000 and \$500,000 per annum for up to 5 consecutive years may be awarded for each Discovery Projects application. Success rate for Discovery Projects for funding commencing in 2024 is 16.3 per cent. applications approved for funding, 330 foreshadowed 689 instances of collaboration with researchers in 72 overseas locations
- **Early Career and Future Fellowships** (mid-career) –great schemes for international mobility



COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION



- CSIRO collaborates in almost all fields of science and link to LA organisations through researcher exchanges, collaboration agreements tech transfer
- CSIRO's largest South American collaborator is Chile with science projects focusing on industries in mining, minerals, aquaculture, and water management.
- Bi-lateral arrangements with LA institutions
- CSIRO ITV CSIRO, UTAS -Bees with backpacks
- Renewable energy, Advancing the Circular Economy, Plastics and Sustainability,
- Next Generation Graduates Program and Academy of Science graduate and internship programs



Bee project uses micro-sensing technology to track bees away from their hives to analyze the effects of pesticides, pollution, climate change, mining operations on the movement of bees and their ability to pollinate



STATE TO STATE FUNDING

- Australian states develop their own implantation strategies, designing projects, fostering collaboration between institutions and researchers, as well as seeking international partners.
- State agencies develop their own funding opportunities to strengthen collab between unis and industry and often engage international collaborators to foster diplomatic ties and trade
- Victorian government for instance has a bi-lateral agreement with a number of Latin American countries, but not Colombia yet. While many of the partnerships stemming from this agreement are with U of Melbourne, of bi-lateral funding for Collaborations between Latrobe, Deakin,—between Brazilian and Peruvian institutions
- A number of similar state-based schemes in NSW, QLD and Victoria around decarbonisation, renewable energy, clean tech, climate and energy action which could form potential funding sources for partnerships with Colombian institutions

