

# 12

## Responsible consumption and production

2015-2019

### Output, Impact, Collaboration

Research supporting SDG12 has grown since 2015, with a compound annual growth rate of 11.6% compared to nearly 3.5% for research in all fields.

China produces the most research supporting SDG12, followed by the US, United Kingdom, India and Italy. Seven of the 10 most prolific locations are high income locations (accounting for more than 37,400 publications); two are upper-middle income locations (China and Brazil) and one is a lower-middle income location (India). No low income locations featured in the top 50.

The top five locations for which research on SDG12 represents the largest share of their research portfolio are Ghana, Nigeria, Sri Lanka, Latvia and Malaysia.

International collaboration yielded 24% of research on SDG12. High income locations collaborated with low income locations on 1% of their total SDG12 research, while nearly 58% of the related output from low income locations came from collaboration with high income locations.

As a measure of academic impact measured by citation, the field weighted citation impact (FWCI) for SDG12 research was above average every year, with an average of 1.36 over the period.

**RELX**  
SDG Resource Centre



This analysis builds on Elsevier's *Sustainability Science in a Global Landscape* report, which was released in 2015 to coincide with the launch of the SDGs. See a [2017 update](#) on key findings on the [RELX SDG Resource Centre](#). Help us to provide insight into SDG research. [Click here to review the research](#)

[See the methodology and definitions](#)

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**84,127**

Publications in period

**11.6%**

Compound Annual Growth Rate in the period

**61.7%**

Publications from high-income locations

**2.0%**

Academic corporate collaboration

**0.2%**

Publications from low-income locations

**1.36**

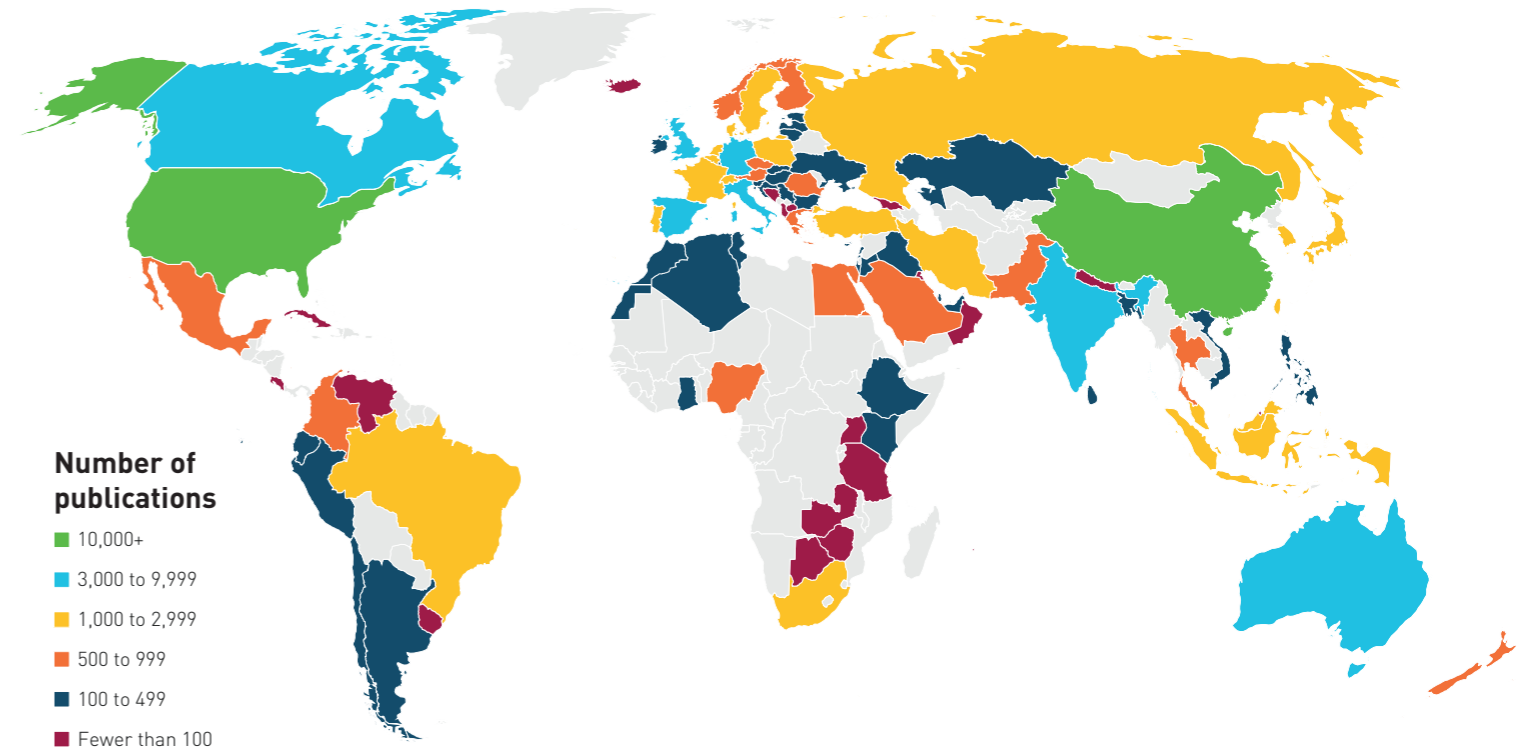
Field-Weighted Citation Impact

**24.2%**

Publications with international collaboration

#### What is FWCI?

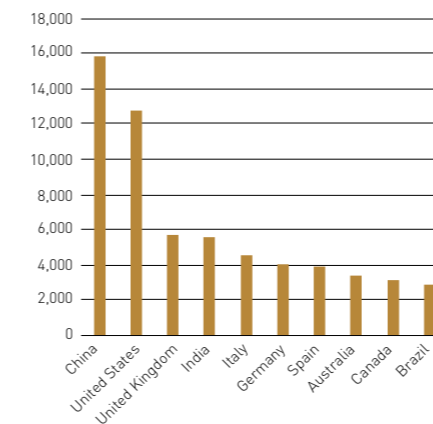
Field-weighted citation impact is an indicator of scholarly impact based on the number of times the publication was cited in other research. An FWCI of above 1.0 indicates the impact is above the normalised average



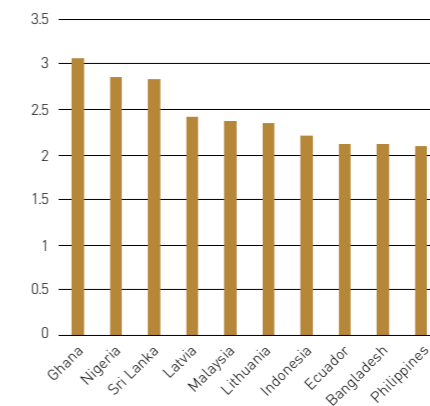
#### Key themes in SDG12 Research



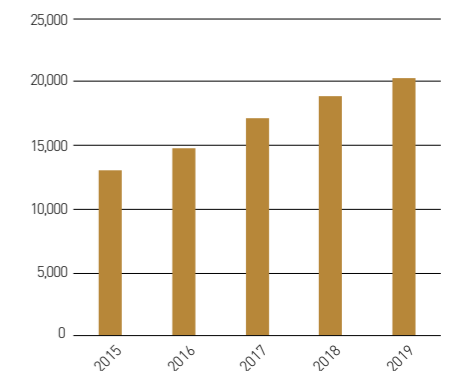
#### Top 10 locations by publication



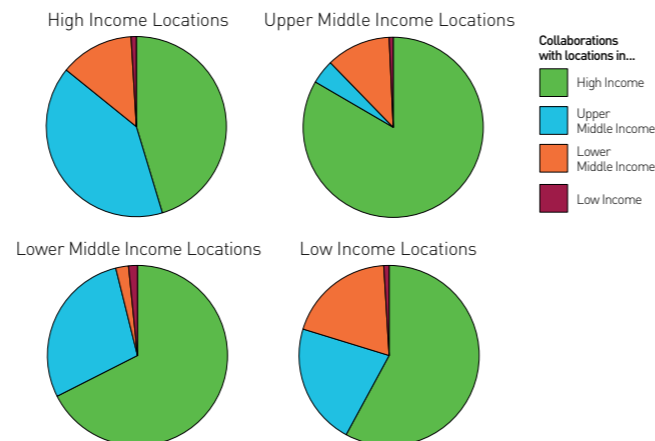
#### Top 10 locations by RAI \*(Relative Activity Index)



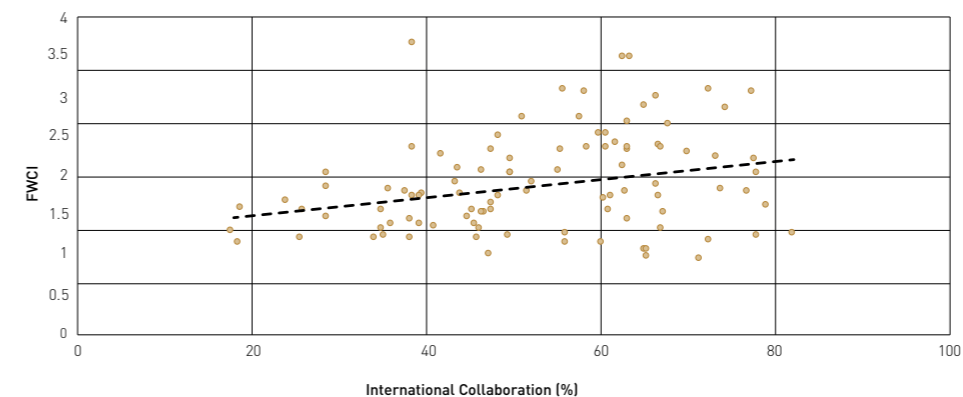
#### Volume of publications supporting SDG12



#### International collaboration between income groups by location



#### International collaboration and research impact



#### Top 10 locations for corporate-academic collaboration

