APPENDIX: THE University Impact Ranking <u>Bibliometric Methodology</u> by SDG – Revised April 2020 to include all SDGs

Each SDG has a section for research that uses bibliometrics and is worth 27% of the composite score. The bibliometrics for each SDG are listed below along with the number of responding universities. Each SDG has its own methodology. Queries for each SDG are based on keyword searches in Elsevier's Scopus on terms associated with the SDG. The data include all indexed publications for a five-year window and are normalized to account for size. For the 2020 methodology the window is 2014-2018. Some of the data come from Scopus' <u>Citescore.</u> Citescore is an alternative ranking of journal quality.

The keywords are not shared with the public. I could not replicate the searches used nor map the SDG definitions to the category definitions used in Citescore.

*SDG 1 (397): No poverty

Research relevant to poverty – 27%

- Field-weighted citation index of papers related to poverty (10%)
- Number of publications related to poverty (10%)
- Proportion of all research papers co-authored with low-income countries (7%)

*SDG 2 (290): Zero hunger

Research related to hunger (27%)

- Proportion of research papers in the top 10% of journals as defined by Citescore (10%)
- Field-weighted citation index of papers (10%)
- Number of publications (7%)

SDG 3 (620): Good health and well being

Research on health and well-being - 27%

- Proportion of papers that are viewed or downloaded 10%
- Proportion of research papers that are cited in clinical guidance 10%
- Number of publications -7%

SDG 4 (676): Quality education

Research on early years and lifelong learning education - 27%

- Proportion of research papers that are viewed or downloaded 10%
- Proportion of research papers in the top 10% of journals as defined by Citescore -10%
- Number of publications 7%

SDG 5 (548): Gender equality

- Proportion of a university's total research output that is authored by women 10%
- Number of publications 7%
- Proportion of papers on gender equality in the to 10% of journals as defined by Citescore 10%
- Number of papers on gender equality 7%

*SDG 6 (330): Clean water and sanitation

Research on clean water and sanitation (27%)

- Proportion of research papers in the top 10% of journals as defined by Citescore (10%) Field-weighted citation index of papers (10%)
- Number of publications (7%)

*SDG 7 (361): Affordable and clean energy

Research on affordable and clean energy (27%)

- Proportion of research papers in the top 10% of journals as defined by Citescore (10%)
- Field-weighted citation index of papers (10%)
- Number of publications (7%)

SDG 8 (480): Decent work and economic growth

Research on economic growth and employment – 27%

- Proportion of papers in the top ten% of journals as defined by Citescore 14%
- Number of publications 13%

SDG 9 (494): Industry, innovation and infrastructure

- Research on Industry, innovation and infrastructure measured by volume 11.6%
- Number of patents published in five-year window (2014-2018 in 2020) that cite research conducted by a university sourced from WIPO, European Patent office and patent offices in the US, UK and Japan - 15.4%

SG 10 (459): Reduced inequalities

Research in reduced inequalities – 27%

- Proportion of papers in the top 10 per cent of journals as defined by Citescore 10%
- Field weighted citation index of papers produced by the university 10%
- Number of publications 7%

SDG 11 (470): Sustainable cities and communities

Research on cities and communities – 27%

- Proportion of papers in the top 10 per cent of journals as defined by Citescore 10%
- Field weighted citation index of papers produced by the university 10%
- Number of publications 7%

** Public access to university libraries 3.8%

SDG 12 (360): Responsible consumption and production

- Proportion of papers in the top 10 per cent of journals as defined by Citescore 10%
- Field weighted citation index of papers produced by the university 10%
- Number of publications 7%

SDG 13 (376): Climate action

- Proportion of papers in the top 10 per cent of journals as defined by Citescore 10%
- Field weighted citation index of papers produced by the university 10%
- Number of publications 7%

*SDG 14 (242): Life below water

Research on life below water (27%)

- Proportion of papers in the top 10 per cent of journals as defined by Citescore 10%
- Field weighted citation index of papers produced by the university 10%
- Number of publications 7%

*SDG 15 (268): Life on land

Research on life on land (27%)

- Proportion of papers in the top 10 per cent of journals as defined by Citescore 10%
- Field weighted citation index of papers produced by the university 10%
- Number of publications 7%

SDG 16 (453): Peace, justice and strong institutions

Research 27%)

- Proportion of papers in the top 10 per cent of journals as defined by Citescore 10%
- Field weighted citation index of papers produced by the university 10%
- Number of publications 7%

SDG 17 (807) – Partnerships for the goals (revised)

Research 27.1%)

- Proportion of academic publications with co-author from developing country (13.55)
- Number of publications that relate to the 17 SDGs (13.55 %)

Change in percentages and rewording from another country to developing county

NOTE: * indicates SDGs added in 2020

Citescore ranks about 23,000 journals on metrics associated with publications and citations. Access Citescore at https://www.scopus.com/sources.uri