



Seeing sustainability from space: Using Earth observation data to populate Sustainable Development Goal indicators

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In 2015, member countries of the United Nations adopted the 17 Sustainable Development Goals at the Sustainable Development Summit in New York. These global goals have 169 targets and 232 indicators based on the three pillars of sustainable development: economic, social, and environmental.

However, substantial challenges remain in obtaining data of the required quality. One promising and innovative way of addressing this issue is to use Earth observation (EO). The research reported here presents an update on ongoing work to develop a Maturity Matrix Framework (MMF) for assessing the suitability of EO derived data for populating the SDG indicators, with an especial focus on those indicators covering the more social and economic dimensions of sustainable development as these are relatively unexplored in an EO context.

An early version of the MMF was published in 2018, and since then the key assumptions have been tested and evolved with inputs from a wide community of EO and indicator experts and conducted through semi-structured interviews with 40 respondents worldwide.

Results from the survey confirm that EO can make an important contribution towards populating a wide diversity of the SDG indicators, and respondents have made suggestions for modifying the MMF. The work is ongoing, but in this paper, the authors will provide an update on survey results and in particular how they impinge upon MMF development, along with some preliminary findings concerning its application to the SDG indicators.

Keywords: Earth Observation, Sustainable Development Goals, indicators