

Mapping for a Sustainable World – Open Education

Kraak, M.J.^a, Robert E. Roth^b, Britta Ricker^c, Ayako Kagawa^d, Guillaume LeSourd^d,

^a University of Twente, m.j.kraak@utwente.nl*

^b University of Wisconsin, reoth@wisc.edu

^c Utrecht University, b.a.ricker@uu.nl,^d

^d United Nations GIS, kagawa@un.org

^d United Nations GIS, lesourd@un.org

Keywords: SDG, Textbook, Open Education

Abstract:

The International Cartographic Association and the United Nations recently collaborated on publishing a book about cartography and the Sustainable Development Goals (SDGs) entitled *Mapping for a Sustainable World*. The book is accessible via <https://www.un-ilibrary.org/content/books/9789216040468/>, and has four distinct sections, starting with statistical and geospatial data, core to better understanding the SDGs. The second section deals with map design considerations and shows why decisions about cartographic design are important in communicating an effective message. The third section on maps and diagrams give insight into which types of maps or diagrams are best suited for highlighting SDG statistical data. Lastly, the fourth section focuses on map use environments – who uses the map and for what purpose. Since the book focusses on SDG indicator data, typically collected for enumeration areas (countries), some cartographic subdomains are less or not covered at all. Examples are topographic mapping and all kind of natural phenomena that do not keep to enumeration areas.

All data used to design and create the maps in the book are based on the open United Nations statistical SDG database and their open boundary files. We will highlight how we think this book will contribute to open science and open education. Examples are the use of the materials in open courseware, instructions and learning paths. The contribution will also tell the story about the journey of two international organizations working together in using various cartographic and data processing techniques to highlight interesting characteristics of the SDGs. We will also describe the challenges of the data and explains the methods for bringing together statistics and mapping.

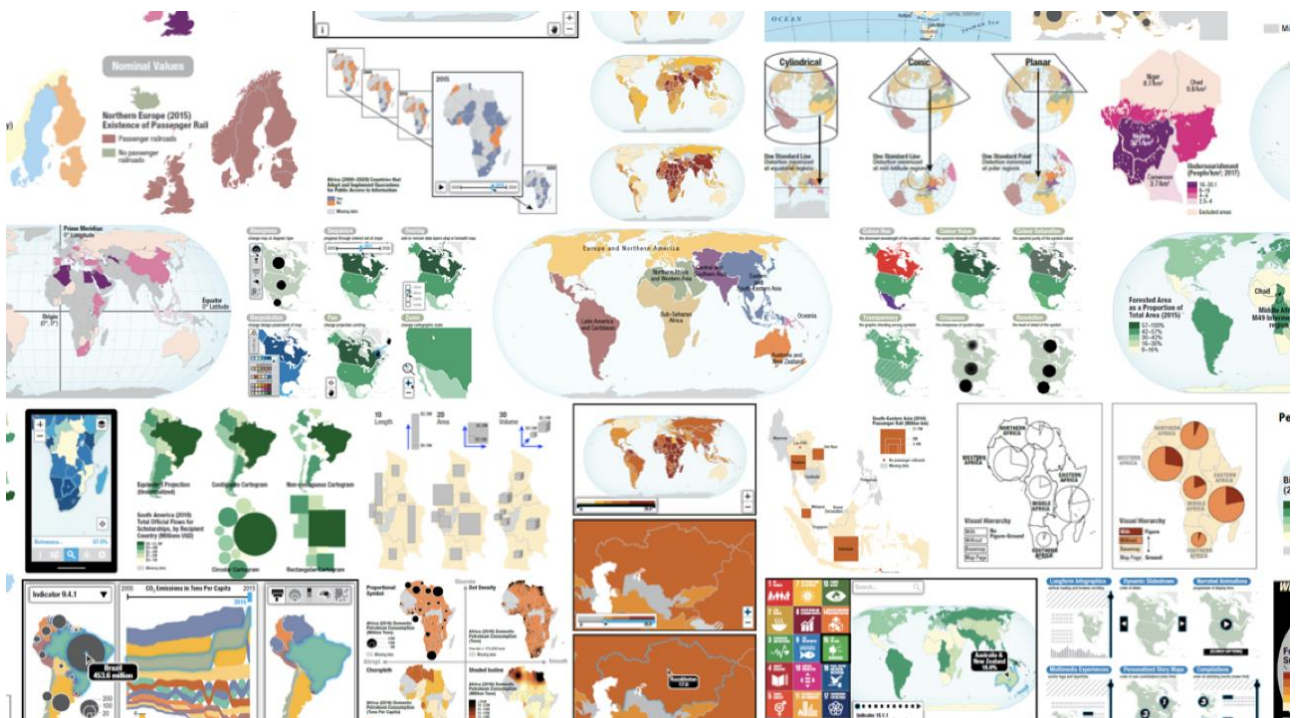


Figure 1. A selection of the maps and diagrams specially produced for the book.