

Hiroshima University Statistical Report 2016 - 2018:

Published Papers Related to SDGs

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The 17 Sustainable Development Goals (SDGs) (Fig. 1) were adopted by all United Nations Member States in 2015, providing a shared blueprint to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. To identify the research focus of Hiroshima University in the context of the SDGs, a statistical analysis of papers published in journals after the adoption of the SDGs is conducted for this report. The data for analysis includes 6,144 articles published from 2016 to 2018 and their corresponding titles, abstracts, journals, and research fields. Publications in 2019 were not analyzed due to incomplete statistical data as of this writing. The publications were then categorized according to applicable SDGs. Note that one publication can be related to more than one SDG.

Fig. 1 The 17 Sustainable Development Goals (SDGs)



Figure 2 shows the total number of papers according to SDGs. Most of the publications were related to SDG3, followed by SDG9 and SDG15. Meanwhile only one paper focused on SDG1.

Fig. 2 Total numbers of papers related to each SDG, 2016 - 2018

innovation, consumption, and production than before. The number of publications relevant to SDG1, SDG5, SDG10, and SDG16 remains relatively unchanged.

Fig. 4 Numbers of papers related to each SDG by year

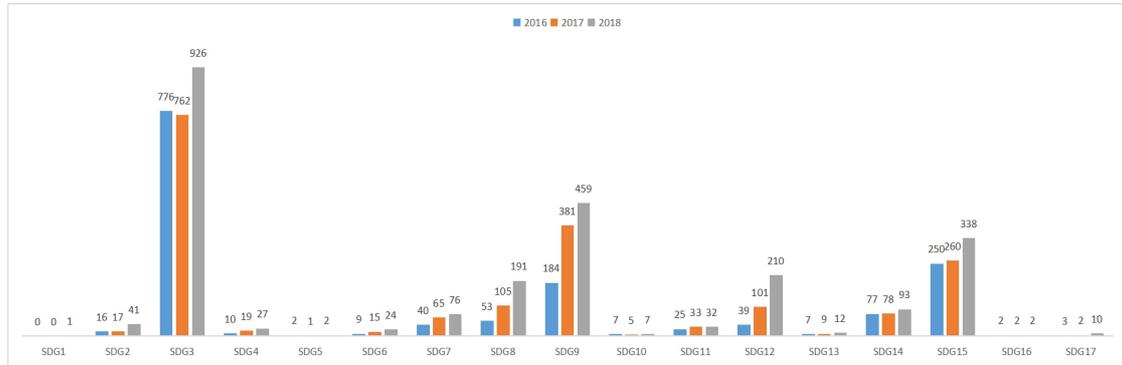
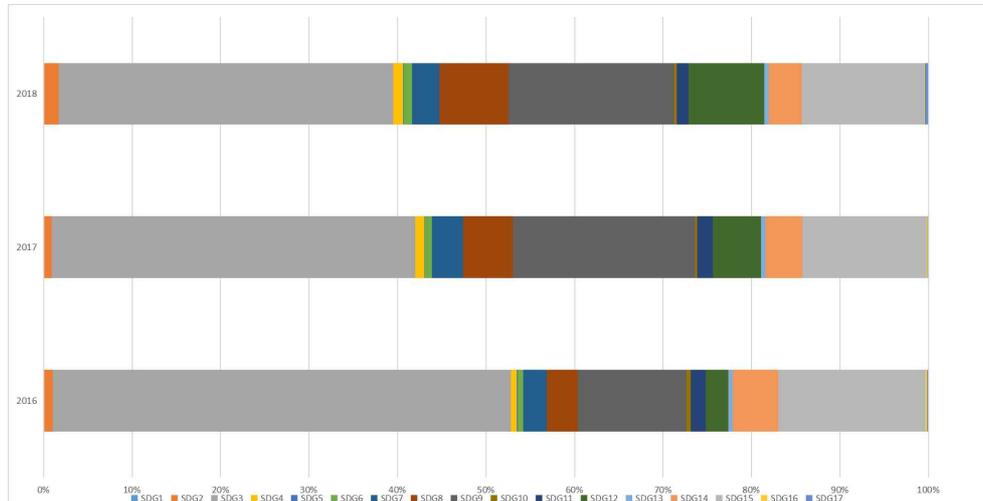


Figure 5 compares the percentages of 17 SDGs year by year. Although the diagram suggests that papers related to SDG3 cover the largest proportion for each year, this proportion has been decreasing. At the same time, the percentages of papers related to SDG8 and SDG12 achieved a substantial increase, which implies the growing importance of sustainable economic development. Researchers at Hiroshima University continue to diversify their research activities, linking them to more fields of SDGs.

Fig. 5 Percentages of 17 SDGs by year



It should be considered that fields of research may have influenced the number of published papers because of different research cycles and priorities. Hence, it is not surprising that there are more papers related to SDG3, which is about people’s health, and to SDG9 and SDG15, given that these two goals cover several fields in the natural sciences. We expect to see more research activities that contribute to multiple goals in the future to help make the SDGs a reality.

Notes:

For accuracy, I read the detailed targets of each SDG first and then assigned the papers to relevant

SDGs based on reviewing their titles and abstracts. In some cases when assigning the SDGs were unclear, I also referred to journals and research fields for verification. This process was slow in the beginning, but as I became more familiar with the targets for each SDG, I was able to process data from sixty papers in one hour. Some advanced and complex academic words were not easy to understand, and I needed to consult the dictionary and Google in this situation, which helped me better understand the papers and finish the review. When I encountered abstracts with research targets at the micro level, like cells and molecules, I considered those papers as not directly related to any SDGs, especially if the abstracts did not mention practical applications. It should be noted that the result of this review may not be completely accurate and objective due to time constraints and my level of familiarity with some research subjects.