ANNOUNCEMENT

Recognizing our authors

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Published online: 26 May 2018
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As editor in chief of the international journal *Sustainability Science*, I am proud to announce winners of the 2017 *Sustainability Science* Best Paper Awards. We conduct the yearly—awards to recognize contributions of researchers that further enhance understanding of sustainability science and demonstrate high standards of scientific quality.

For this award, we considered all papers published in 2017 excluding note and comments, editorials, message article and papers authored by a member of the committee. From a total of 62 eligible papers published in 6 issues of 2017, three winners (1 outstanding paper and 2 honorable mentions) have been chosen following our selection process. Our entire advisory board along with selected active editors are encouraged to nominate papers which members feel make a particularly good contribution to the advancement of sustainability science. The nominated papers are then ranked based on reviewer impressions and downloads, among other criteria, and then are hand selected by our nominating committee. Links and short descriptions of the winning papers are shared below.

I congratulate the authors for their hard work on this significant accomplishment, as well as *Masafumi Nagao* from United Nations University (UNU-IAS), Japan, and *Peter Wilderer* from European Academy of Sciences and Arts, Germany, for their extended support from the beginning of the process. We believe authors deserve recognition for diligent work beyond a citation count and other article metrics. Conversely, this serves as an indicator for our readership to find high-quality-, new research publications.

This award provides acknowledgements to winning paper in form of an award plate, certificates and a €200 book voucher from Springer for winning papers. Winning papers will also be available open access for 2 months as of the July issue publication.

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The winning papers are:

Outstanding Article

For the paper entitled

Transdisciplinary co-design of scientific research agendas: 40 research questions for socially relevant climate engineering research. <https://doi.org/10.1007/s11625-016-0376-2>.

Authors: Masahiro Sugiyama, Shinichiro Asayama, Takanobu Kosugi, Atsushi Ishii, Seita Emori, Jiro Adachi, Keigo Akimoto, Masatomo Fujiwara, Tomoko Hasegawa, Yasushi Hibi, Kimiko Hirata, Toru Ishii, Takeshi Kaburagi, Yuki Kita, Shigeki Kobayashi, Atsushi Kurosawa, Manabu Kuwata, Kooiti Masuda, Makoto Mitsui, Taku Miyata, Hiroshi Mizutani, Sumie Nakayama, Kazuyo Oyamada, Takaaki Sashida, Miho Sekiguchi, Kiyoshi Takahashi, Yukari Takamura, Junichi Taki, Taketoshi Taniguchi, Hiroyuki Tezuka, Takahiro Ueno, Shingo Watanabe, Rie Watanabe, Naoyuki Yamagishi and Go Yoshizawa

January 2017, Volume 12, Issue 1

Short description:

If we, humans, had a capacity to develop a technology to change the earth's climate, should we refrain from it? Or should we do it? Under what condition and how? Scientists and policymakers have begun discussing such technologies called climate engineering or geoengineering because these technologies could be used to cool the earth to counteract global warming. Among them, stratospheric aerosol injection has received significant attention. Although it has not been developed, it is not a science fiction either. This is a high-stake technology with large uncertainties, and it is desirable to reflect the interests and concerns of stakeholders and the publics from the early stage of research and development. And yet, almost all previous research projects have been developed by experts and policymakers.

We researchers of diverse disciplines, stakeholders, and policymakers in Japan—brainstormed possible research questions. Starting from about 350 questions, we narrowed them into 40 in a 1-day workshop, following the methodology that has been extensively used in various issues that involve science

and policy. In the selection process, we used a tailored voting method, in which any question receiving at least one vote remained, to protect minority opinions. This methodological innovation was crucial for such a controversial topic as climate engineering. The resulting 40 questions reflect a diverse set of concerns and interests and can serve as a starting point for future research projects. The study also demonstrated that with a careful planning, transdisciplinary research on a contentious issue is indeed feasible.

Honorable mention

For the paper entitled

Sustainability assessment as problem structuring: three typical ways. <https://doi.org/10.1007/s11625-016-0417-x>.

Authors: M. Dijk, J. de Kraker, A. van Zeijl-Rozema, H. van Lente, C. Beumer, S. Beemsterboer and P. Valkering

March 2017, Volume 12, Issue 2

Short description:

The article examines three sustainability assessment (SA) approaches for problem structuring and offers advice for combining an analytical approach with a way of opening the social framings. The reflexive sustainability assessment that is proposed occupies the middle ground between more ‘transformative’ SA approaches, which demand radical changes in legal and governance structures, and the more widely implemented but strategically less effective environmental impact assessment tradition.

Sustainability assessment (SA) refers to a broad range of approaches to align decision-making with the principles of sustainability and is increasingly employed. Nevertheless, in public and private sectors, sustainability results are still disappointing, and this paper reflects on this problem and proposes a way forward. We argue that, because sustainability issues are generally wicked problems (i.e., a ‘complex of interconnected factors in a pluralistic context’), effective assessments need to be reflexive about the definition of the issue and about the criteria for sustainable solutions. Based on a distinction of policy problems, we characterize SA as a form of problem structuring, and we distinguish three typical ways of problem structuring, corresponding to three different ways of integrating reflexivity in the assessment. We illustrate these routes in three examples. We discuss the way reflexivity is integrated in each example by discussing the mix of methods, SA process and epistemological balance.

Rather than merely calling for ‘more stakeholder participation’, our aim is to call for more reflexivity integrated into the SA approach, and we conclude by proposing a process map for reflexive sustainability assessment to support this.

Honorable mention

For the paper entitled

Spatial variability in sustainable development trajectories in South Africa: provincial level safe and just operating spaces. <https://doi.org/10.1007/s11625-016-0418-9>.

Authors: Megan J. Cole, Richard M. Bailey and Mark G. New

September 2017, Volume 12, Issue 5

Short description:

The adoption in late 2015 of the ‘2030 Agenda for Sustainable Development’ and its 17 Sustainable Development Goals (SDGs) is the first time all nations have agreed to a policy agenda that addresses environmental, social and economic issues together. With over 230 global indicators and many more national indicators to be developed, there is a need for tools to summaries and communicate progress on the SDGs and highlight national priorities. The 2030 Agenda also calls for data disaggregation to expose inequalities and SDG reporting at sub-national levels—where sustainable development will be delivered. In this article, we create visual tools to communicate and explore the sub-national variability in sustainable development indicators. Our provincial barometers are a disaggregation of our national barometer for inclusive sustainable development developed in 2014, which was based upon the ‘planetary boundaries’ and ‘safe and just space’ frameworks. The barometers define safe environmental boundaries and just social floors for South Africa’s nine provinces and provide radar plots for current status on 20 key indicators and trend plots for the change in status over the past 20 years. Our results show significant variation across the provinces and identify where the most pressing challenges are and where action is needed. The barometers and trend plots are novel in that they present comparable environmental and social data on key indicators over time for all South Africa’s provinces. They provide visual tools that communicate a range of key challenges and risks that provincial governments face in an accessible way, and the article provides an early case study of spatial disaggregation of national data that is required for the SDG implementation.

I extend my congratulations to all the winning authors.

Kazuhiko Takeuchi
Editor-in-chief

References

Include references of below winning articles

Sugiyama Masahiro, Asayama Shinichiro, Kosugi Takanobu, Ishii Atsushi, Emori Seita, Adachi Jiro, Akimoto Keigo, Fujiwara Masatomo, Hasegawa Tomoko, Hibi Yasushi, Hirata Kimiko,

- Ishii Toru, Kaburagi Takeshi, Kita Yuki, Kobayashi Shigeki, Kurosawa Atsushi, Kuwata Manabu, Masuda Kooiti, Mitsui Makoto, Miyata Taku, Mizutani Hiroshi, Nakayama Sumie, Oyamada Kazuyo, Sashida Takaaki, Sekiguchi Miho, Takahashi Kiyoshi, Takamura Yukari, Taki Junichi, Taniguchi Taketoshi, Tezuka Hiroyuki, Ueno Takahiro, Watanabe Shingo, Watanabe Rie, Yamagishi Naoyuki, Yoshizawa Go (2017) Transdisciplinary co-design of scientific research agendas: 40 research questions for socially relevant climate engineering research. *Sust Sci* 12(1):31–34
- Dijk M, de Kraker J, van Zeijl-Rozema A, van Lente H, Beumer C, Beemsterboer S, Valkering P (2017) Sustainability assessment as problem structuring: three typical ways. *Sust Sci* 12(2):305–317
- Cole Megan J, Bailey Richard M, New Mark G (2017) Spatial variability in sustainable development trajectories in South Africa: provincial level safe and just operating spaces. *Sust Sci* 12(5):829–848