

Advances in sustainable development research and the seven year itch

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ABSTRACT

This issue of the *European Journal of Sustainable Development Research* is part of its seventh year, and it is clear that since publishing its first issue in 2017 the journal has had a notable impact on the field of sustainable development through having published research on many recent advances. The topics covered in the *European Journal of Sustainable Development Research* have in large part, but not exclusively, centered around the 17 Sustainable Development Goals of the 2030 Agenda for Sustainable Development. The topics likely to be addressed in the future will probably continue to focus on the Sustainable Development Goals and what follows them, but are also likely to embody numerous new trends in society.

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With this issue of the *European Journal of Sustainable Development Research*, we are well into the journal's seventh year. That leads me, as founding Editor in Chief of the journal, to mull over the future of the journal and its focus on sustainable development. Will interest continue to grow and become more pronounced, or will it undergo the "seven-year itch"? That phrase denotes the idea that happiness in a long-term romantic relationship or marriage declines after seven years or so. Thus, I ponder if interest in the journal begin to flag or not? Similarly, as we are little past seven years into the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development, adopted by the United Nations in September 2015, I also wonder whether interest in them will wane or continue to wax.

Based on the evidence, I feel that the journal has grown in stature and influence over the seven years since its start, reflecting the growing research activity in numerous disciplines and the widespread interest in sustainable development. The journal has attained an international presence, attracting submissions from a large number of countries, representing various regions and cultures. The journal has thus grown into a high quality periodical covering numerous topics of sustainable development.

The launch of the journal coincided with the launch in many countries of activities to support the United Nation's SDGs. As these activities have expanded and developed, so too has the journal developed over its first seven years, expanding to include development efforts and advances to mitigate

environmental problems like climate change, reduce poverty, enhance living standards, combat inequalities, and improve innovation and education.

The *European Journal of Sustainable Development Research* has had a particularly noteworthy impact on innovation and education, boosting access to knowledge and facilitating new advances and developments by permitting research results of various types to be available to those interested. Although we remain a long way from achieving the 17 SDGs by 2030, it is very likely that increasing effort will be put forth on them up to 2030 and almost certainly beyond, and that these new developments are likely to be addressed in the future in the *European Journal of Sustainable Development Research*.

Research of the type published in the *European Journal of Sustainable Development Research* contributes in a meaningful and important way to initiatives to address sustainability challenges around the world. As sustainability is still a relatively young discipline, much research is needed for the discipline to advance. Some illustrations related to the journal are informative:

- The exchange of practices, experiences, and knowledge about sustainable development applications is of great importance, and is central to the *European Journal of Sustainable Development Research*. Such cooperation is essential to advancing technologies, methods and approaches for sustainable development, in all areas (e.g., environmental, socioeconomic, and technical).

- Sustainability measures and indexes that are meaningful and sound, holistic, implementable in practice and agreeable to all are needed, to help gauge performance and progress towards sustainable development. The journal is positioned well to contribute to the development of such measures and indexes.

In efforts to move towards sustainable development, society faces many challenges. These straddle many fields, embracing environmental challenges like climate change, economic issues like wealth inequalities and disparities, and social issues. The latter issues vary greatly by region and country, often involving low living standards, inadequate clean water and food and poor health care. Some sustainability challenges require technological solutions while others require economic, political and social ones. Making the challenges more complex is the fact that they often are multidisciplinary in nature, necessitating the cooperation of experts from numerous fields. The *European Journal of Sustainable Development Research* has played an important role in this work, through supporting efforts to address sustainable development challenges by providing a productive venue for sharing relevant developments, advances and knowledge.

In addition, numerous new trends, advances and changes have occurred in society that are likely to render the challenges in moving towards sustainable development even more daunting. Some examples follow:

- **Artificial intelligence.** AI has the potential to foster many developments and advances in many fields, as well as the potential to cause many problems. But taken as a whole, the potential to make advances in sustainable development methods, technologies and operations offered by AI are profound and could lead to great strides in a relatively short time.
- **Big data and data analytics.** The collection and use of large amounts of data provide the potential of significant advances in sustainable development, through improving understanding of the actual performance and potential of such initiatives.
- **Renewable energy technologies.** Advances in energy sustainability are being made at an impressive pace, shifting many societies from fossil fuels to less environmentally problematic forms of energy, and having a notable impact on efforts for sustainable development. This includes new versions of renewable energy technologies (e.g., solar, wind, geothermal, biomass), as well as improved energy intensive systems, like net zero

energy buildings and communities, and cleaner automobiles.

- **Polygeneration and integration.** Advances in processes so they are more integrated and produce multiple products at once rather than using separate processes for each has great potential, when designed and implemented astutely, for making activities in society more efficient, clean and affordable.

- **Circular economy.** Increased interest and applications of a circular economy are changing the way people and regions think and act, in terms of designing to accommodate reuse and recycling, and avoiding wastes.

- **Climate change.** Evidence of climate change continues to mount, making efforts to address this challenge more urgent and important than ever. As the increase in global average temperatures from pre-industrial times approaches 1.5°C, work on mitigating and adapting to climate change become essential.

- **Other pollution like plastics.** The increase in understanding of new environmental problems like plastics and microplastics pollution add to the challenges in achieving sustainable development from an environmental perspective.

- **Pandemic and health.** The lessons learned from the COVID 19 pandemic, in terms of health, economics, social impacts and other factors have in many areas modified the way we deal with them. Being ready for future unexpected health crises has been more engrained in design and development efforts, ultimately supporting sustainable development in the future.

- **Social divides and distrust.** The increases in social divides in recent years, and even wars, as well as the growing distrust of many institutions by some are making it increasingly difficult to move towards sustainable development, as such efforts ultimately require the support of people and cooperation among nations.

These trends, and the topics they reflect, are likely to be addressed in the *European Journal of Sustainable Development Research* over its next seven years and beyond, contributing to society's need for sustainable development in general, and the Sustainable Development Goals in particular. These efforts should help humanity and society in shifting towards sustainable development, which I feel is a paramount requirement. Given the profound importance of this, I certainly do not envision a "seven-year itch" towards the journal or the SDGs.