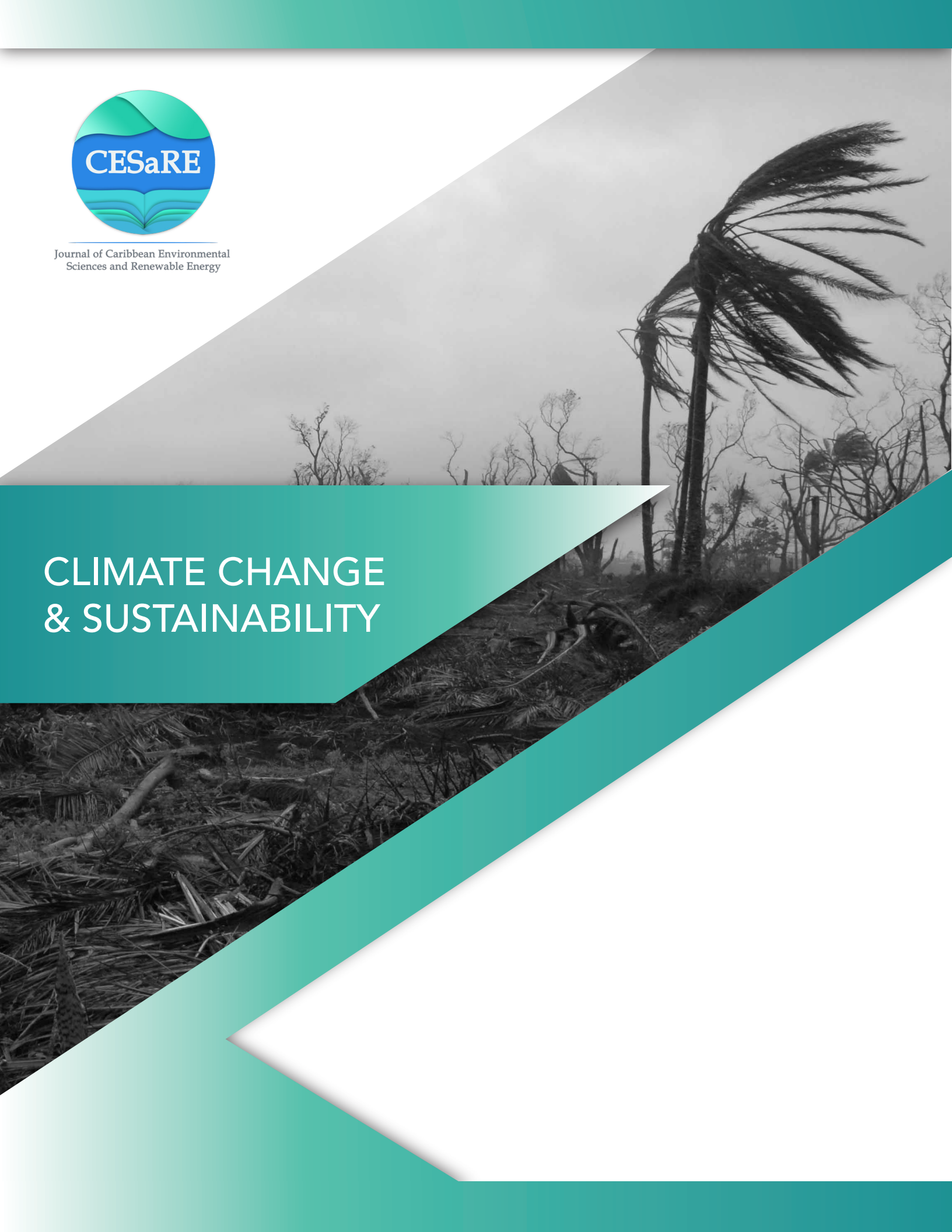




Journal of Caribbean Environmental  
Sciences and Renewable Energy

# CLIMATE CHANGE & SUSTAINABILITY



## AUTHOR FOREWORD

*“I’m very glad to have been asked to write a review article for the initial issue of a much needed new Caribbean academic Journal. More so because it will provide open-source, peer-reviewed material relevant to developing countries and Small Island Developing States (SIDS). As the problems that beset human development become more complex, Journals like CESaRE will become increasingly important.*

*This new Journal comes at an opportune time and I wish it the best of success.”*

- Dr. David Smith



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## Climate Change and Achieving Caribbean Sustainable Development

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### INTRODUCTION

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#### The Climate is Vital for High-Quality Caribbean Life, but it's Changing

For people living in the Caribbean, climate change is likely to be one of the most profound challenges to improving human wellbeing. Climate Change is not a distant threat; tropical ecosystems will experience new climates earlier than other countries<sup>[1]</sup>, and these changes will affect Caribbean people, setting back our efforts to achieve Sustainable Development Goals (SDGs). Our concerns about climate change should not be limited to worries about tropical cyclones. Climate change affects fundamental aspects of life such as water availability and may increase floods and drought. Sea level rise increases the erosion of the beaches that tourism depends on, and increases flood hazards.<sup>[2]</sup> Increased ocean acidification reduces the survival of fish larvae, and the viability of shellfish and corals<sup>[3]</sup> thus potentially affecting the tourism and fishing industries.<sup>[4]</sup> Increased temperatures may reduce economic output for Caribbean and Central American countries by as much as 2.4% for each degree increase<sup>[5]</sup>, in addition to increasing the viability of mosquitos and requiring more energy for cooling people and storing food.

#### Our Development is not Sustainable

The Caribbean and Latin America has with few exceptions (Haiti, Honduras, St Lucia, Suriname and Venezuela) eliminated extreme poverty, but progress in health, economic growth, inequality and justice remains challenging.<sup>[6]</sup> Despite the dependence of most Caribbean economies on healthy marine ecosystems, the status of life under water, and life on land, is poor. Although progress towards the energy

goal is good in several Caribbean states, this does not translate into meeting the climate SDGs.<sup>[6]</sup> The highest-ranking Caribbean island in the **Sustainable Development Solutions Network** (SDSN) Index and Dashboard for 2018 is Cuba at 42, however, many Caribbean SIDS score lower than the regional average. What is worrying is that no Caribbean country rates "Green" in education and the trend for education is downward for two CARICOM members. Since education and training are vital for goals eight (decent work and economic growth and industry) and nine (innovation, industry and infrastructure), those goals currently have low scores for most Caribbean countries.

#### How can we fix this?

Climate-related events, depending on their scale can cause great destruction, erode or reverse development gains and slow the pace of development. Consequently, Caribbean countries need to build resilience to climate change induced problems at the level of individuals, communities, businesses, nationally, and regionally. Our aim should be to recover, not to where we were before the event occurred, but to the point we would have been had the event never happened.

To build resilience one must build human capital. One way to do this is through education since education is associated with increased long term resilience to disasters.<sup>[7][8]</sup> The World Bank report on the wealth of nations indicates that human capital is the most

important component of wealth.<sup>[9]</sup> Building humancapital is key to improving human wellbeing. For island states with limited natural resources, it's vital to build human capital through education and training. Without a well-educated and trained workforce, improving wellbeing and economic growth is almost impossible.

Addressing climate change is not easy, and while tropical countries may focus on adaptation, there is still uncertainty about how best to adapt, and precisely what to adapt to. We have to adapt while simultaneously addressing other developmental problems such as improving governance and justice. Climate change is a wicked problem.<sup>[10]</sup> One way to tame a wicked problem is to generate knowledge about it. The role of scientists is to produce as much new data and information as possible through research and disseminate it effectively. This could include continued update of data on risk and the status of the physical world; accurate forecasting and scenario building.

Research should also be directed to problem solving, particularly for the major problems that beset development in the Caribbean. Of course, scientific data and research alone are not enough. Good information needs to be disseminated, made freely available and applied to problems. Journals, particularly if they allow open access, can play an important role in disseminating quality information and evidence to researchers, particularly those in developing countries. Some publications should bridge the gap between science and policy by brokering knowledge and creating information that can be used by the private sector, governments, communities and civil society.

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*To access any closed-source references used in this article, please contact the author for an original manuscript.*

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