Insight Medical Publishing

Environmental and Toxicology Studies Journal

2020

Vol.4 Issue.2

Amazonia and Climate change: current threatens and future perspectives

Luisa Maria Diele-Viegas

University of Maryland, College Parl, MD 20742, USA

Abstract

The Amazon forest plays a major role in global carbon budget, and thus in mitigating the effects of climate change by stocking nearly half of the tropical forest carbon. Several ecoregions of the biome may lose their current climate conditions in the next few years, even considering a decrease in current global greenhouse gases emission rates. Besides climate change, recent events are threatening the Amazon integrity, such as deforestation, agrobusiness, mining activities, and uncontrolled fire. The Brazilian parliament has emitted intentions on increasing the resource exploitation in the biome, mostly inside indigenous lands, by encouraging and viabilizing mining and agrobusiness activities. This leaded to an unprecedented fire season in 2019, in addition to deforestation rates reaching the highest values in the last 12 years, and increased invasions to indigenous territories leading to the death of several indigenous leaders. This may have drastic consequences for the Amazon biodiversity and traditional populations, besides hamper the achievement of world's carbon emissions targets to decrease current global warming rates. Here we discuss the exposure and sensitivity of the Amazon to climate change considering a business-as-usual scenario of greehouse gases emissions, the potential impacts of Brazilian political perspectives on the conservation of the biome and its consequences to human livelihood, environmental conservation and the world climatic system. Brazil hosts over 50% of the Amazon, so government's actions should go toward sustainable policies rather than inadequate environmental regulation aiming short term profits. Otherwise the Amazon (and perhaps the world's climatic system) will be in danger.

Biography

Luisa Maria Diele-Viegas has completed her PhD in Ecology and Evolution at the age of 27 years from Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil, in 2019. She is a post-doctoral associated at the department of Biology of the Universtiy of Maryland, College Park, MD, United States. Her research has been focused on the impacts of climate change on tropical environments,

biodiversity conservation and scientific communication. She has published several papers in reputed journals and has been given presentations regarding this topic in several conferences and events around the world.

Eder Johnson de Area Leão Pereira is a PhD candidate in Computational Modeling and Industrial Technology at Centro Integrado de Manufatura e Tecnologia of the Serviço Nacional de Aprendizagem Industrial, Salvador, Bahia, Brazil. He is a professor at the Instituto Federal do Maranhão, Bacabal, Maranhão, Brazil. His main research interests are in environmental economy and complex systems. He has published more than 20 papers in reputed journals and has been serving as an editorial board member of repute.

Carlos Frederico D. Rocha has a Ph.D. in Science (Ecology) obtained at Universidade Estadual de Campinas, Campinas, São Paulo, Brazil in 1992. He is an associate professor at Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil. His main interests are in Ecology and conservation of amphibians and reptiles. He is Level I-A Researcher (Higher level of Brazilian scientists attributed by the Brazilian Council of Science and Technology – CNPq) of the Brazilian Environmental Ministry and has published more than 600 papers in reputed journals.