

EDITORIAL 19-4

CLIMATE CHANGE: THE LONG ROAD FROM THEORY TO ACTION

In August 2016 Brazil hosted the 31st edition of the Olympic Games. During the opening ceremony, the roots of the Brazilian nation were highlighted, together with its creativity and natural beauty. Rainforest green was the main color of the sequences, transmitted live to the whole world. One of the highlights was the warning call in relation to climate change. By means of images and text, Brazil emphatically showed our need to act upon this challenge and face the novel dynamics the world is coming across.

This massive celebration to advantage of the billion spectators worldwide to send an important message: we need to think about the future of our planet. For this purpose, the organizers approached the issue of global warming and the necessity of meeting the goals set to counter the effects of climate change, such as greenhouse gases emission, polar ice melting, and sea level rise.

Post-COP21, better known as The Paris Agreement, which gathered 196 countries at the end of 2015, new global environmental governance emerges. It has lightened up a path and has stimulated Nation-States to comply to new standards and cut emissions, looking to significantly reduce fossil fuel use and invest in renewables. By reaffirming the aim of limiting the temperature rise to 2°C above pre-industrial levels, it suggests commitment to cut CO₂ emissions and states industrialized countries should contribute to the adaptation of developing ones, both technologically and monetarily. Moreover, it acknowledges that strong global carbon divesting could foster a truly sustainable development.

A more favorable political atmosphere was created towards decision making and complying with goals. Nonetheless, the agreement establishes the conditions for this to take place, but neither it imposes deadlines nor specific aims. We must understand the urgency of this matter, which is increasingly important for generations to come, in a planet where climate disruptions have already caused extreme weather events, rain pattern shifts, sea level rise, coastal areas flooding, and mosquito-borne diseases.

The opening ceremony portrays Brazil as a country engaged in facing climate change, and thus rises as a leader in changing people's behavior and way of living. Of course it is worth noticing that the devisers of the ceremony are renowned Brazilian artists, internationally acknowledged, and who are deeply engaged in social and environmental causes. They knew well how to send an effective message to the world and to their own country on how to act and respond to this global problem.

Despite the opening ceremony being considered as the image Brazil wanted to show the world to, it does not mean that the climate change involvement agenda is showing itself positively, or that contradictions do not exist. Even among COP21 signatory nations, which are assuming fundamental commitments for greenhouse gases reductions, there are still plenty of examples of contradictory policy. China and the USA are still the biggest polluting countries, and India emits great amounts of methane from cattle breeding in addition to the fossil fuels they burn, such as coal. We could also mention Japan, which is likely to invest in fossil fuels after the Fukushima accident.

Brazil is not so far away; in spite of the message it tried to send at the Olympics, we can't ignore the draft law on environmental license flexibility, actually at the National Congress, which reduces the time needed for projects approval, and eliminates the need for a technical analysis and dialogue with society, nullifying the present regulating agencies.

If we accept that climate change is consequence of the planet's modernization process which led to landscape transformation, destruction of forests, savannas, mangroves, and to increased CO₂ emissions, flexibility of the licensing process will enable the return of environmentally degrading production practices, therefore contributing to climate change enhancement. Furthermore, the main emission source in Brazil is change in land use; environmental licensing should be strengthened to show the government commitment to a new production model.

There is a clear contradiction between the Olympics opening sequence and what the business sector, State officials, and legislators do these days. The challenge lies in aligning those different visions and actions in order for Brazil to take the leadership in fighting against climate change.

This volume of *Ambiente & Sociedade* not only brings articles dealing with varied social-environmental matters, but it also contains five articles analyzing central issues of the complexity of the climate problem.

The case study of a palm oil production company is approached in the article entitled "*Transnational arenas, public policies and the environment: the case of Palm in the Amazon*", by **João Paulo Candia Veiga** and **Pietro Carlos Rodrigues**. It discusses the rise of non-State actors in the production of environmental and social rules and norms, in transnational arenas which flee from control by governments and international organizations.

By means of the institutional approach of the study of auto-organization and auto-governance by Elinor Ostrom, the authors **Márcio de Araújo Pereira**, **Sérgio Schneider**, **Jan Douwe Van Der Ploeg** and **Marcelino de Souza** talk about collective action by social actors in common resources management around *Serra da Bodoquena* National Park. "*The Collective Action on Governing the Commons in the Surroundings of Protected Areas*" is the title of the work.

The analysis of data from the beef industry in Santa Catarina/Brazil developed in "*Environmental ethics and sustainable territorial development: an analysis from the speciesism category*" by **Luciano Félix Florit** and **Diego da Silva Grava**, tries to identify land areas evincing a disproportionately intense speciesism, relating it to a social-political, economic, and symbolic process.

Thayse Cristina Pereira Bertucci, Edson Pereira Silva, Aguinaldo Nepomuceno Marques Jr. and Cassiano Monteiro Neto use secondary data and discussions on Political Ecology and Critical Environmental Education to evaluate correlations between development of cities by the shores of the lagoon and its impact on the environmental quality of the ecosystem in “*Tourism and urbanization: environmental problems of the Araruama Lagoon – State of Rio de Janeiro, Brazil*”.

“*Environmental Risk Management in Municipalities of the Metropolitan Area of Cariri – Ceará, Brazil*”, by **Ana Patrícia Nunes Bandeira, Paula Hemilia de Souza Nunes and Maria Gorethe de Souza Lima** presents the disorderly occupation situation in the Metropolitan Region of Cariri, state of Ceará, and proposes risk areas management actions in order to contribute with minimizing natural disasters.

The authors of “*Methodological Proposal for Prioritization Ranking of Municipalities for Implantation of Payment for Environmental Services Programs*”, **Leonardo Silva Fernandes and Rosângela Garrido Machado Botelho**, discuss payment for environmental services programs at the municipal level, using research variables within: Environmental Impacts, Institutional Apparatus, and Environmental Actions.

The article “*Water: the urgency of a territorial agenda*” brings and discusses the water supply crisis and resulting rationing risk on a regional scale in the southeast of Brazil in 2014 and 2015. For that purpose, **Gisela Aquino Pires do Rio, Helena Ribeiro Drummond and Christian Ricardo Ribeiro** argue that it is not possible to fully understand the supply crisis and its emergency measures just by considering flow control and reduction; new territorial spatialities are rising and imposing features in water management.

Using ethnographical analysis, authors **Pedro Tomé and Miguel Ángel Casillas** review the social conflict in Temacapulín, a village in Jalisco/Mexico, that rose against the government’s will of building a huge dam to take water to remote cities. Missing people and inhabitant displacements are approached in “*Hidden, Moved, Forgotten: the building of the dam El Zapotillo en Jalisco, Mexico*”.

Gilles Massardier, Franck Poupeau, Pierre-Louis Mayaux, Delphine Mercier and Joan Cortinas take on an analytical approach for urban water management conflicts and policy-making, on the basis of political coalitions, in “*Multi-level policy coalitions: An interpretative model of water conflicts in the Americas*”. For this purpose, four main issues are articulated: the repositioning of social and political struggle for water access, ecological transition effects analysis, the reintegration of those struggles and their challenges in a multi-level approach, and the research on contemporary policy-making.

Special Issue

Bibliographical and documental research was the tool for writing “*Globally unassisted Tuvaluans affected by climate changes: official documents, human rights and the “no future”?*”, especially that related to Political and Sociological Theory dealing with citizenship, human rights, and sovereignty. **Patricia Benedita Aparecida Braga and Fabio Lanza** tried to think about the Tuvaluan case facing climate change, from a new analytical perspective considering as present and ongoing the environmental impacts from climate change in the region.

Authors **João Guerra** and **Luísa Schmidt** analyze the matches between discourse and practice from the Sustainable Development Goals and the COP21 with the intention of reinforcing universal engagement strategies. The result of their work is the article “*Making wishful thinking a reality – from SDGs to COP21*”.

The article “*Decision making and adaptation processes to climate change*”, by **Eduardo Bustos Sandoval** and **Sebastián Vicuña Díaz**, argues the need of revising the processes involved in decision making, considering climate change adaptation; in this way, it would be possible to develop alternatives that can bring light on how to deal with expected future impacts or reduce present climate vulnerability, therefore creating more resilient systems.

Within a climate change context, **Pedro Roberto Jacobi** and **Roberta de Assis Maia** review the factors that impact the relationship between science and politics, and how to overcome the obstacles that arise from the complexity of contemporary social-environmental problems, and emphasize the enhancing and mobilizing drivers in their article “*Challenges and Strategies to Strengthen Relationship Between Science and Politics Regarding Climate Change*”.

Finally, author **Daniel Ryan** in his article “*The design of Climate Institutions: Contributions for the analysis*” explores the challenges, limitations, advantages and disadvantages of creating government institutions in charge of the climate agenda in a Latin American context.

We wish you all a great and profitable reading.

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<http://dx.doi.org/10.1590/1809-4422ASOCeditorialV1942016>