CLIMATE CHANGE AND AMAZONIA: A PLIGHT FOR A REGIONAL APPROACH

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In May 2018, levels of carbon dioxide in the atmosphere exceeded 411 parts per million (ppm), the highest monthly average ever recorded.\(^1\) Scientists also found that the rate of CO\(_2\) increase is accelerating, from an average of 1.6 ppm per year in the 1980s, to 2.2 ppm during the last decade.\(^2\) With the rise of CO\(_2\) far from slowing down, the world is grappling with multi-faceted solutions to address climate change. A combination of solutions from different stakeholders, regions and government levels is essential. With the capacity to absorb up to two billion tonnes of CO\(_2\) per year – about 20% of the atmospheric carbon emitted by the burning of fossil fuels – the Amazon rainforest should be a key aspect of a global strategy.

Divided between eight countries, the Amazon rainforest is one of the world’s most powerful tools for tackling climate change through mitigation. It acts as a global repository of GHG and can thus help to regulate global climate patterns. As deforestation in the Amazon countries increases, this capacity diminishes. Amazonia can serve as a carbon sink only for as long as it absorbs more CO\(_2\) than it releases. With the world’s weather patterns increasingly worsening, the forest’s contribution to stabilizing global weather is at risk. As global temperatures rise, the Amazon could enter into a potentially calamitous feedback loop. Warmer oceanic waters will dry out the basin, which in turn will release more carbon into the atmosphere. Warmer temperatures and a dryer forest will also increase forest fires, emitting more carbon.

Faced with these additional challenges, cooperation in the Amazon region is indispensable. Amazon countries have traditionally relied on cooperation from Northern countries for technical and financial assistance in reducing deforestation and tackling climate change. For example, Norway and Germany have been constant supporters, assisting in the implementation of local policies and pushing for further action. However, developing countries often compete for international development assistance from the North. As resources are limited, two additional types of cooperation have become increasingly relevant in the past decades.\(^3\)

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\(^1\) See [https://scripps.ucsd.edu/programs/keelingcurve/](https://scripps.ucsd.edu/programs/keelingcurve/).
\(^3\) For a comparative analysis of regional cooperation for mitigation, see Maria Antonia Tigre, *Cooperation for Climate Mitigation in Amazonia: Brazil’s Emerging Role as a Regional Leader*, TRANSNATIONAL ENVIRONMENTAL LAW, 5(2), 401-425 (2016). For a comparative analysis of regional cooperation for adaptation, see Maria Antonia Tigre, *Building A Regional Adaptation Strategy for Amazon Countries* (forthcoming, 2018).
South-South Cooperation (SSC) has become a feasible alternative. Developing countries have started to share knowledge, skills, expertise and resources to meet their development goals through concentrated efforts. Recent developments in SSC take the form of increased volume of trade, foreign direct investment, movements towards regional integration, sharing of expertise and solutions, and other exchanges. SSC has an especially relevant role in climate mitigation technology transfer, through the diffusion of innovation systems and deployment of new technologies by emerging economies. Examples include technology cooperation agreements among and between developing countries, often in the context of capacity-building programmes or financial assistance. These can involve countries in contiguous regions or between different regions. The prominence of regionally coordinated agreements in environmental protection, which expand cooperation through intergovernmental organizations in the South, suggests the increasing role of regions. As environmental issues affect nations across borders and regionally, SSC facilitates the implementation of multilateral environmental agreements (MEAs). Pre-existing regional groupings and networks may provide the best platform for enhanced national activities. The existence of an effective institutional framework, with decision-making mechanisms already in place, avoids the need for bilateral action and added bureaucracy.

Although its existence is not well known, Amazonia has a regional body that works towards advancing regional cooperation in environmental protection and, more specifically, climate change: the Amazon

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4 For an analysis of SSC in environmental law, see K.L. Koh & N.A. Robinson, *South-South Cooperation: Foundations for Sustainable Development* in S. Alam et al. (eds), *International Environmental Law and the Global South* (Cambridge University Press, 2015), pp. 553–71. The chapter uses the Association of Southeast Asian Nations (ASEAN) as an example, highlighting the need for further research into other regional schemes.

5 UN Office for South-South Cooperation, ‘What is South-South Cooperation?’, available at: http://ssc.undp.org/content/ssc/about/what_is_ssc.html.


8 Koh & Robinson, n. 5 above, p. 553.

9 Ibid., p. 563.

Cooperation Treaty Organization (ACTO).\textsuperscript{11} The ACTO was created in 1998\textsuperscript{12} as a development under the 1978 Amazon Cooperation Treaty (ACT).\textsuperscript{13} As an international organization, it ensures political and diplomatic coordination both among the Amazon countries regionally as well as with non-Amazonian countries globally. It strengthens dialogue between its members, with the common goal of protecting territories and promoting sustainable development.\textsuperscript{14} As a forum for cooperation, it ensures periodical meetings of high-level representatives to address common problems in the region. It encourages research and knowledge exchange to address regional issues. Strategically, it is a forum for regional analysis of the Amazon Basin and rainforest as a whole. As such, it improves decision making in social, economic and sustainable development. As a regional environmental framework, it could be inferred that climate change is central to the ACTO agenda. However, the organization only recently made it a priority. In 2010, a new strategic agenda was developed to bestow the ACTO with a renewed role in cooperation towards new international challenges.\textsuperscript{15} Climate change was one of the emerging themes to warrant proper coordination.\textsuperscript{16} The strategy has an eight-year implementation period and includes actions in the short, medium and long term, such as evaluating the economy of the forests and the services it provides in order to develop climate mitigation projects.

As one of the first steps in enhancing the new agenda, the ACTO promoted an initiative in satellite monitoring for deforestation.\textsuperscript{17} The initiative develops and implements participatory systems of forest monitoring and strengthens the platform for regional coordination. It reproduces the methodology of satellite monitoring that has been successfully used by Brazil over the past years. Through several technical cooperation agreements, Brazil’s Instituto Nacional de Pesquisas Espaciais (INPE) shares knowledge and provides technical capacity to replicate the methodology in the remaining Amazon countries.\textsuperscript{18} In addition to placing monitoring rooms in each country, which provide countries with the technical skills required to gather information to combat deforestation,

\textsuperscript{11} For an in-depth analysis of the organization and a critical assessment of the environmental work done in the past few decades, see Maria Antonia Tigre, \textit{REGIONAL COOPERATION IN AMAZONIA: A COMPARATIVE ENVIRONMENTAL LAW ANALYSIS} (Vol. 13, International environmental law). Leiden/Boston: Brill/Nijhoff. (2017).
\textsuperscript{14} ACT Amendment Protocol, p. 1.
\textsuperscript{16} Ibid., p. 52, item H.
\textsuperscript{18} Ibid., p. 4.
the initiative draws up regional deforestation maps. It is one of the ACTO’s key strategies to combat climate change at the regional level.\(^{19}\)

The project deserves praise as it embraces several UNFCCC ideals. It enhances regional dialogue and information sharing, and promotes technology transfer using the system developed by the Brazilian government and replicating it in neighboring countries. It also implements differentiation as Brazil acts as a ‘developed country’ in terms of becoming a regional leader. The regional scheme has functioned as a successful avenue for cooperation and a unique variant of SSC.

The climate change strategy also specifically addresses climate adaptation, including mandates to support countries in multilateral efforts, proposing research to possible actions, and developing local projects in the basin. Additionally, climate adaptation is highlighted in the short-term activities with respect to the water agenda, with the directive to promote an integrated management approach to water resources, including adaptation to climate change. While an advancement to include climate change as a focus of regional cooperation, the goals were broadly drafted. Little was done to turn those from plans to action in the following years. With reduced action, the goals remained mere aspirations. One exception is the GEF Amazon Project,\(^{20}\) which was implemented after funding from the Global Environmental Facility (GEF) was secured.

Unfortunately, the ACTO has not managed to build upon its satellite monitoring successes. It has remained an organization for sharing information and developing a few specific projects, but has seldom established strategic long-term policies that promote change regionally. The ACTO is used only occasionally as a vehicle to promote a shared vision for the Amazon rainforest in global climate negotiations. Based on the relevance of the region for climate change, the ACTO should act as a unified voice for Amazonia. In addition, it is essential to think strategically of a mitigation and adaptation plan that could promote the strengths of each country to benefit Amazonia as a whole. With the challenge of climate change becoming increasingly more difficult, this regional role is more important than ever. A cooperative strategy would benefit Amazon countries at the national level, the region and the world as a whole.
